TECHNICAL DATA SHEET

TECHNIART FLOOR SYSTEM 500 PU

A set of polymer products for making highly elastic floor underlayments and for the protection of concrete substrates indoors and outdoors.

CHARACTERISTICS

Available in a range of colours - Techniart colour chart and CQ aggregate colour chart.
Long-term UV and weather resistance.
High flexibility.
Smooth and non-slip finish possible.
Ease of maintenance.
A highly aesthetic solution with a wide range of applications.

INTENDED USE

Coats and flooring on substrates requiring crack bridging capabilities.
Widely used in industrial buildings, warehouses and especially in garages and multi-storey indoor and outdoor car parks.
A practical and aesthetically pleasing finish on terraces, balconies and garden paths.

APPROVALS/STANDARDS

Complies with EN 1504-2:2004

SYSTEM DESIGN

POSSIBLE SYSTEM VARIANTS GUARANTEEING THE MAINTENANCE OF THE PARAMETERS DECLARED IN THE SYSTEM DECLARATION OF PERFORMANCE:

THIN COAT PAINTED SYSTEM 0.6 - 1.0 mm		
PRIMING - TECHNIPLAST 400RST	-	0.3 – 0.4 kg/ m^2
BROADCAST WITH QUARTZ SAND NQ 0.1-0.4 or NQ 0.3-0,7	-	max 2.0 kg/ m^2
SEALING COAT - TECHNIPLAST 500 PU UVR-C	-	~0,6 kg/ m^2
TECHNIPLAST 1000 PROTECTIVE COAT	-	0.1 - 0.15 kg/m^2 (optional)
THIN COAT PAINTED SYSTEM WITH FLAKES 0.6 - 0.8 mm		
PRIMING - TECHNIPLAST 400RST	-	0.3 – 0.4 kg/ m^2
SEALING COAT - TECHNIPLAST 500 PU UVR-C	-	~0,6 kg/ m^2
BROADCAST WITH COLOURED FLAKES	-	0.01 kg/m^2
TECHNIPLAST 1000 PROTECTIVE COAT	-	0.1 - 0.15 kg/m^2
SMOOTH CASTING ~ 1.0 - 1.5 mm		
PRIMING - TECHNIPLAST 400RST	-	0.4 - 0.6 kg/m^2
BROADCAST WITH QUARTZ SAND NQ 0.1-0.4 or NQ 0.3-0,7	-	max. 0.8 kg/m^2 (optional)
BASE COAT - TECHNIPLAST 500 PU UVR - C	-	1.5 - 3.0 kg/m^2
COLOURED DECORATIVE FLAKES	-	0.01 - 0.1 kg/m^2 (optional)
TECHNIPLAST 1000 PROTECTIVE COAT	-	0.1 - 0.15 kg/m^2 (optional)

TECHNIART sp. z o.o.
ul. Rumiankowa 2
Nowa Bukówka
96-321 Żabia Wola
phone/fax (+48) 46 857 83 94
(+48) 46 857 83 95
e-mail: biuro@techniart.pl
www.techniart.pl

ECO PU BROADCAST SYSTEM 1.5 - 2.0 mm

PRIMING - TECHNIPLAST 400RST	-	0.3 - 0.4 kg/m^2
BROADCAST WITH QUARTZ SAND NQ 0.3-0.7	-	max. 0.8 kg/m^2 (optional)
TECHNIPLAST 500 PU UVR-M PRIMER COAT	-	~0.6 kg/m^2
BROADCAST WITH QUARTZ SAND NQ 0.3-0.7 OR 0.8-1.2	-	~ 3.5 kg/m^2 (broadcast until dry)
SEALING COAT - TECHNIPLAST 500 PU UVR-C	-	0.5 - 0.8 kg/m^2
TECHNIPLAST 1000 PROTECTIVE COAT	-	0.1 - 0.15 kg/m^2 (optional)

MONOCOLOUR BROADCAST SYSTEM W-1 2.0 - 3.0 mm

PRIMING - TECHNIPLAST 400RST	-	0.3 - 0.4 kg/m^2
BROADCAST WITH QUARTZ SAND NQ 0.3-0.7	-	max. 0.8 kg/m^2
FLEXIBLE MEMBRANE - TECHNIPLAST 500 PU UVR-M	-	1.2 - 1.6 kg/m^2
BROADCAST WITH QUARTZ SAND NQ 0.4-0.8 or NQ 0.8-1.2	-	~ 6.0 kg/m^2 (broadcast until dry)
SEALING COAT - TECHNIPLAST 200/500 PU UVR-C	-	0.5 - 0.8 kg/m^2
TECHNIPLAST 1000 PROTECTIVE COAT	-	0.1 - 0.15 kg/m^2 (optional)

MONOCOLOUR BROADCAST SYSTEM W-2 2.0 - 4.0 mm

PRIMING - TECHNIPLAST 400RST	-	0.3 - 0.4 kg/m^2
BROADCAST WITH QUARTZ SAND NQ 0.3-0.7	-	max. 0.8 kg/m^2
FLEXIBLE MEMBRANE - TECHNIPLAST 500 PU UVR-M	-	0.8 - 3.0 kg/m^2
INTERLAYER - TECHNIPLAST 500 PU UVR-M	-	0.8 - 1.2 kg/m^2
BROADCAST WITH QUARTZ SAND NQ 0.4-0.8 or NQ 0.8-1.2	-	~ 6.0 kg/m^2 (broadcast until dry)
SEALING COAT - TECHNIPLAST 200/500 PU UVR-C	-	0.5 - 0.8 kg/m^2
TECHNIPLAST 1000 PROTECTIVE COAT		0.1 - 0.15 kg/m^2 (optional)

ECO MIX PU BROADCAST SYSTEM 1.5 - 2.0 mm

PRIMING - TECHNIPLAST 400RST	-	0.3 - 0.4 kg/m^2
BROADCAST WITH QUARTZ SAND NQ 0.3-0.7	-	max. 0.8 kg/m^2 (optional)
TECHNIPLAST 500 PU UVR-C PRIMER COAT	-	0.4 - 0.6 kg/m^2 (colour similar to that of CQ sand)
BROADCAST WITH QUARTZ SAND CQ-ECO MIX 0.4-0.8	-	~ 3.5 kg/m^2 (broadcast until dry)
TECHNIPLAST 500 PU UVR-T SEALING COAT	-	0.4 - 0.6 kg/m^2
TECHNIPLAST 1000 PROTECTIVE COAT	-	0.1 - 0.15 kg/m^2 (optional)

CQ PU BROADCAST SYSTEM W-1 2.0 - 3.0 mm

PRIMING - TECHNIPLAST 400RST	-	0.3 - 0.4 kg/m^2
BROADCAST WITH QUARTZ SAND NQ 0.3-0.7	-	max. 0.8 kg/m^2
FLEXIBLE MEMBRANE - TECHNIPLAST 500 PU UVR-M	-	1.2 - 1.6 kg/m^2
BROADCAST WITH QUARTZ SAND CQ 0.4-0.8 or CQ 0.8-1.2	-	~ 6.0 kg/m^2 (broadcast until dry)
TECHNIPLAST 500 PU UVR-T SEALING COAT	-	0.5 - 0.8 kg/m^2
TECHNIPLAST 1000 PROTECTIVE COAT	-	0.1 - 0.15 kg/m^2 (optional)

CQ PU BROADCAST SYSTEM W-2 3.0 - 4.0 mm

PRIMING - TECHNIPLAST 400RST	-	0.3 - 0.4 kg/m^2
BROADCAST WITH QUARTZ SAND NQ 0.2-0.8	-	max. 0.8 kg/m^2
FLEXIBLE MEMBRANE - TECHNIPLAST 500 PU UVR-M	-	1.5 - 3.0 kg/m^2
INTERLAYER - TECHNIPLAST 500 PU UVR-M	-	0.8 - 1.2 kg/m^2
BROADCAST WITH QUARTZ SAND CQ 0.4-0.8 or CQ 0.8-1.2	-	~ 6.0 kg/m^2 (broadcast until dry)
TECHNIPLAST 500 PU UVR-T SEALING COAT	-	0.5 - 0.8 kg/m^2
TECHNIPLAST 1000 PROTECTIVE COAT	-	0.1 - 0.15 kg/m^2 (optional)

COMPACT SYSTEM CQ W-1 2.5 - 3.5 mm

PRIMING - TECHNIPLAST 400RST	-	0.3 - 0.4 kg/m^2
BROADCAST WITH QUARTZ SAND NQ 0.2-0.8	-	max. 0.8 kg/m^2
BASE LAYER - TECHNIPLAST 500 PU UVR-M	-	~ 0.6 kg/m^2
BROADCAST WITH QUARTZ SAND CQ 0.4-1.2 or CQ 1.0-1.6	-	~ 3.0 kg/m^2
INTERLAYER - TECHNIPLAST 500 PU UVRT-T	-	~ 0.6 kg/m^2
BROADCAST WITH QUARTZ SAND CQ 0.4-1.2 or CQ 1.0-1.6	-	~ 3.0 kg/m^2
MECHANICAL TROWELLING	-	for obtaining uniform surface
REMOVAL OF UNBOUND AGGREGATE	-	after floor curing
TECHNIPLAST 500 PU UVR-T SEALING COAT	-	0.3 - 0.5 kg/m^2
TECHNIPLAST 1000 PROTECTIVE COAT	-	0.1 - 0.15 kg/m^2 (optional)

COMPACT SYSTEM CQ W-2 3.0 - 4.0 mm

PRIMING - TECHNIPLAST 400RST	-	0.3 - 0.4 kg/m^2
BROADCAST WITH QUARTZ SAND NQ 0.2-0.8	-	max. 0.8 kg/m^2
FLEXIBLE MEMBRANE - TECHNIPLAST 500 PU UVR-M	-	1.5 - 3.0 kg/m^2
INTERLAYER - TECHNIPLAST 500 PU UVR-M	-	~ 0.6 kg/m^2
BROADCAST WITH QUARTZ SAND CQ 0.4-1.2 or CQ 1.0-1.6	-	~ 3.0 kg/m^2
INTERLAYER - TECHNIPLAST 500 PU UVRT-T	-	~ 0.6 kg/m^2
BROADCAST WITH QUARTZ SAND CQ 0.4-1.2 or CQ 1.0-1.6	-	~ 3.0 kg/m^2
MECHANICAL TROWELLING	-	for obtaining uniform surface
REMOVAL OF UNBOUND AGGREGATE	-	after floor curing

TECHNIART sp. z o.o.
ul. Rumiankowa 2
Nowa Bukówka
96-321 Żabia Wola
phone/fax (+48) 46 857 83 94
(+48) 46 857 83 95
e-mail: biuro@techniart.pl
www.techniart.pl

TECHNIPLAST 500 PU UVR-T SEALING COAT	-	0.3 - 0.5 kg/m^2
TECHNIPLAST 1000 PROTECTIVE COAT	-	0.1 - 0.15 kg/m^2 (optional)
THIN COAT SAND FLOORING (DIY VARIANT) 1.0 - 2.0 mm		
LEVELLING PRIMING TECHNIPLAST 400/400RST	-	0.4 - 0.5 kg/m^2
QUARTZ SAND FOR RESIN NQ 0.1-0.4 or NQ 0.3-0.7	-	
TECHNIPLAST 500 UVR-C BASE COAT	-	ratio 1 : 1 (by weight)
BROADCAST WITH QUARTZ SAND NC 0.4-0.8 or NC 0.8-1.2	-	0.3-0.4 kg/ m^2
TECHNIPLAST 500 UVR-C SEALING COAT	-	~ 2.5 kg/m^2 (broadcast until dry)
	-	~ 0.7 kg/m^2
ECO CARPET SYSTEM PU W-1 - 10.0 mm		
PRIMING - TECHNIPLAST 400/400RST	-	0.4 - 0.6 kg/m^2
BROADCAST WITH QUARTZ SAND NC 1.0-1.6	-	max. 1 kg
BASE LAYER - TECHNIPLAST 500 PU UVR-T	-	~ 1.0 kg/m^2
CC/CM-ECO NATUR RESIN GRANULATE	-	~ 12.5 kg/m^2
MANUAL OR MECHANICAL TROWELLING	-	for obtaining uniform surface

SUBSTRATE

REQUIREMENTS:

EXECUTION	The concrete base shall be executed in accordance with the relevant standards	
CONCRETE CURING	min. 28 days	
HUMIDITY	max. 4% by weight	(it is advisable to take a concrete sample and then weigh it before and after baking in the kiln)
TEMPERATURE	min.10° C	
PULL-OFF STRENGTH	~ 1.5 MPa	(pull-off test)

PREPARATION:
The concrete substrate should be homogeneous without any "marl", cracks, scratches or cavities, and if they occur, they should be repaired using TECHNIPLAST materials.

Cement laitance and other layers that may weaken adhesion should be removed mechanically by shot blasting or grinding, and dust and loose parts cleaned up.

Old concrete substrates should be repaired using appropriate TECHNIPLAST materials.

Do not apply TECHNIART FLOOR SYSTEM on poorly or uninsulated substrates; this may lead to an increase in vapour pressure under the floor layer and consequently damage the floor.

APPLICATION

CONDITIONS:

AMBIENT TEMPERATURE	min.10° C max. 30°C
SUBSTRATE TEMPERATURE	min. 10°C and at least 30°C above dew point temperature
AIR HUMIDITY	max. 75%

MIXING:

If crystallisation is observed in the material container, heat the material to 40°C and wait until the crystals have completely disappeared before mixing the ingredients.
Materials to be used should have a minimum temperature of 15°C.
Pour the entire contents of the container with component B into the container with component A. Mix with a slow-speed mixer for approximately 3 minutes (to avoid excessive aeration of the material, it is recommended to use a mixer speed of approximately 300 rpm).
Pour the material into a clean container and mix again for approximately 2 min.
Due to the chemical reaction taking place, the material should be applied immediately after mixing. Do not leave the mixed material in the packaging.

TECHNIART sp. z o.o.
ul. Rumiankowa 2
Nowa Bukówka
96-321 Żabia Wola
phone/fax (+48) 46 857 83 94
(+48) 46 857 83 95
e-mail: biuro@techniart.pl
www.techniart.pl

WORKING TIME WITH THE PRODUCT ON THE SUBSTRATE:

FITNESS FOR 10°C TEMPERATURE (on substrate)	40 - 45 min.
FITNESS FOR 20°C TEMPERATURE (on substrate)	20 - 25 min.
FITNESS FOR 30°C TEMPERATURE (on substrate)	10 - 15 min.

PRIMING:

TECHNIPLAST 400RST should be spread evenly with a rubber squeegee and then rolled out with a resin roller using the crosswise technique. The substrate should be uniformly saturated with the priming material.

LEVELLING:

If it is necessary to make a levelling layer or a priming and levelling layer, it should be carried out with the use of a levelling mortar made of TECHNIPLAST 400RST with an addition of quartz sand NQ 0.1-0.4 or NQ 0.2-0.8 in a weight proportion of ~1:0.6.
The mortar should be spread evenly with a stainless-steel flat trowel.
The surface thus levelled can optionally be broadcast with NQ quartz sand.

LAYERS OF TECHNIPLAST 500 PU UVR-M:

The material should be applied evenly with a serrated squeegee and then vented with a spiked roller.
When applying thin intermediate coats, a resin roller and cross spreading technique can be helpful.

SEALING COAT:

TECHNIPLAST 500 PU UVR- C/UVR-T should be spread evenly with a hard rubber squeegee, making sure that the surface is free of stagnation and that saturation is uniform. In the case of broadcast flooring, the surface can be additionally rolled out with a resin roller using the crosswise method.
The best effect is achieved by applying the resin in two coats.

MATT COAT:

In case of finishing the floor with TECHNIPLAST 1000 matt varnish, the material should be applied with a specialist varnish roller using the crosswise method. To avoid streaks, do the last painting one way with the weight of the roller without pressing it against the surface.

CLEANING OF TOOLS

Tools should be cleaned immediately after use with a solvent such as acetone or xylene.

WORKING WINDOW

TECHNIPLAST/TECHNIPLAST 10°C	min. 24 h	max. 72 h
TECHNIPLAST/TECHNIPLAST 20°C	min. 12 h	max. 48 h
TECHNIPLAST/TECHNIPLAST 30°C	min. 8 h	max. 24 h

STRESS

	PEDESTRIAN TRAFFIC	LIGHT LOAD	FULL LOAD
SUBSTRATE TEMPERATURE 10°C	~ 72 h	~ 6 days	~ 10 days
SUBSTRATE TEMPERATURE 20°C	~ 24 h	~ 4 days	~ 7 days
SUBSTRATE TEMPERATURE 30°C	~ 12 h	~ 2 days	~ 5 days

TECHNIART sp. z o.o.
ul. Rumiankowa 2
Nowa Bukówka
96-321 Żabia Wola
phone/fax (+48) 46 857 83 94
(+48) 46 857 83 95
e-mail: biuro@techniart.pl
www.techniart.pl

CLEANING

Observance of the cleaning conditions specified in this manual for TECHNIPLAST coats is an important element which guarantees maintenance of correct technical parameters of the coats used.

DAY-TO-DAY CLEANING:
Day-to-day cleaning should be carried out at a frequency that allows for the removal of ongoing soiling resulting from normal floor and wall use. This applies in particular to the cleaning of localised dirt and the removal of hard and sharp loose materials that may cause scratching and scuffing of the floor surface, e.g.: sand, mud.

PERIODIC CLEANING:
Periodic cleaning should be carried out at a frequency that will prevent the permanent accumulation of dirt on the floor and wall. The frequency of this type of cleaning depends on the degree of exposure to dirt, as well as sanitary requirements.

DEEP CLEANING:
Deep cleaning should be carried out on floors and walls that are very heavily and permanently soiled and for which traditional cleaning methods and agents do not have the desired effect.

EMERGENCY CLEANING:
Emergency cleaning should be carried out whenever the floor is contaminated with substances that may affect the technical and functional properties of the floor, e.g.: oil, grease, fats, aggressive chemicals.

CLEANING METHODS:

dry	manual or mechanical sweeping, vacuum cleaning.
wet	manual cleaning: mop, soft brush, cotton rags.
	mechanical cleaning; scrub and pickup machines, pressure-controlled machines.

RECOMMENDED CLEANING AND CARE PRODUCTS:

day-to-day cleaning	- neutral or slightly alkaline chemicals with a pH of approx. 7÷10,
periodic cleaning	- neutral or slightly alkaline chemicals with a pH of approx. 7÷10,
thorough cleaning	- suitable cleaning agents,
emergency cleaning	- sawdust or highly absorbent rags + suitable cleaning agent

The choice of means and method of cleaning the object depends on the size of the surface, as well as the degree of soiling. Any water remaining after cleaning should be removed immediately.

SAFETY

Products being components of the TECHNIART FLOOR SYSTEM 500 PU building product should be used only in ventilated premises. Avoid contact with skin and eyes. Protective goggles, gloves and work clothes are absolutely recommended during application. Open flames must not be used during the course of the work, nor must any work that is a source of fire be carried out. Detailed information on safety and environmental protection is available in the Safety Data Sheets of individual products comprising the TECHNIART FLOOR SYSTEM 500 PU building product.

FINAL NOTES

The above information on the TECHNIART FLOOR SYSTEM 500 PU building product, as well as on the products comprising it, and in particular its proposed areas of application and methods of application, has been given in good faith based on our current state of knowledge.
The technical data cited above are based on laboratory studies and tests.
Due to the lack of control over the actual conditions and quality of application and the manner of use of the products included in the TECHNIART FLOOR SYSTEM 500 PU building product, TECHNIART stipulates that the data contained in this technical sheet cannot constitute the basis for TECHNIART's responsibility.
With the issue or update of this data sheet, previous data sheets lose their validity.

TECHNIART sp. z o.o.
ul. Rumiankowa 2
Nowa Bukówka
96-321 Żabia Wola
phone/fax (+48) 46 857 83 94
(+48) 46 857 83 95
e-mail: biuro@techniart.pl
www.techniart.pl