Technical Data Sheet

STZ Prefill Installing Falls and Level Profiles

DESCRIPTION:
STZ PREFILL is a component of allnex Industrial Floor Toppings | Resin Flooring Systems.
allnex Prefill defines a number of aggregate filled resin system for filling deep holes, large chases, depressions or to produce sloped falls in flat floors prior to the installation of an allnex Floor Topping System. (Or to flatten an undulating floor).

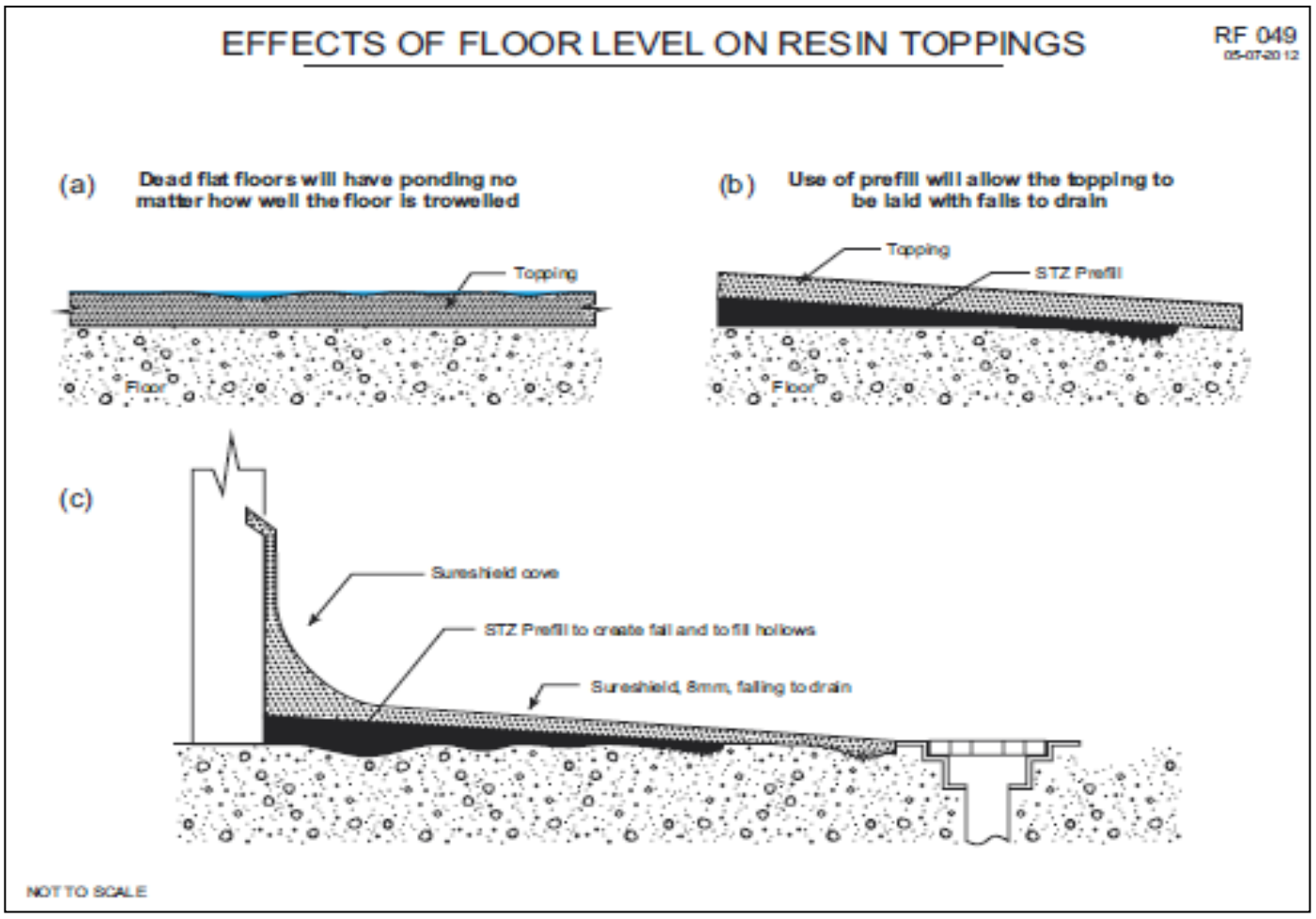
STZ Prefill is available in a number of systems which must be compatible with the designed allnex finish system. o Polyester resin o Epoxy Resin o Engineered Cement Screed

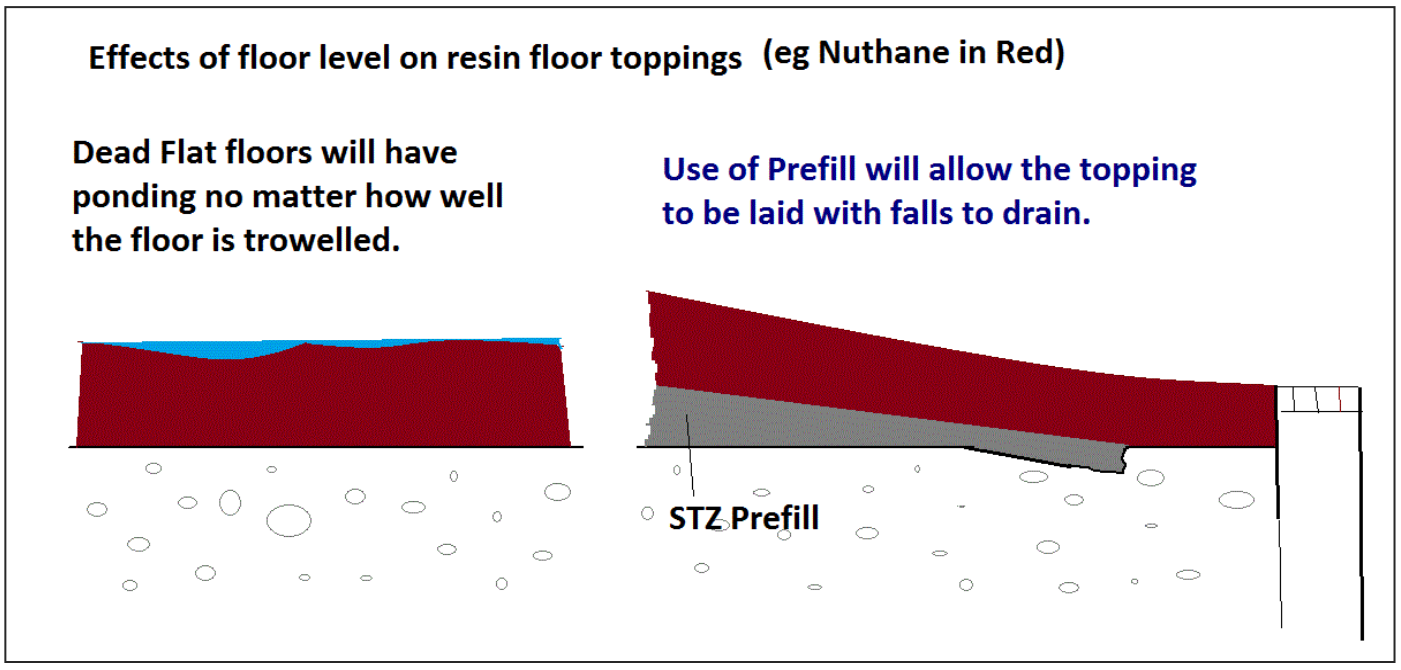
SUGGESTED USES:

- Intended to create correct falls; often to drains.
- STZ Prefill Type #1 is specially recommended where a rapid repair of unsatisfactory surfaces is required at moderate cost.
- STZ Prefill Type #1 can be overlaid with an allnex Floor Topping following 24 hours cure time, unlike cement based filling systems which will require an extended cure period. (Exceptions: Nuthane & Epoxy systems – May be installed over cement based Prefill in shorter timeframes. Refer: Chart Below)
- STZ Prefill Type #1 can be installed to almost any thickness and will not delaminate or become drummy in thin applications.
- Often used to create falls in floors to allow liquids to fall to drains without ponding. Prefill is recommended for use beneath the following allnex Floor Toppings:

Resin Flooring Product Selection	STZ Prefill Type #1	Overlay Time #1		Prefill Type #2	Overlay Time #2		Prefill Type #3	Overlay Time #3
Sureshield	Polyester	24hrs		Engineered Bagged Screed allnex screed 20+	28 days		Concrete; Hi-strength : low water/cement ratio	28 days
Industrial Terrazzite	Polyester	24hrs		Engineered Bagged Screed allnex screed 20+	28 days		Concrete; Hi-strength : low water/cement ratio	28 days
Decorative Terrazzite	Polyester	24hrs		Engineered Bagged Screed allnex screed 20+	28 days		Concrete; Hi-strength : low water/cement ratio	28 days
Architectural Terrazzite	Polyester	24hrs		Engineered Bagged Screed allnex screed 20+	28 days		Concrete; Hi-strength : low water/cement ratio	28 days
Surechem VE	Polyester	24hrs		Engineered Bagged Screed allnex screed 20+	28 days		Concrete; Hi-strength : low water/cement ratio	28 days
Quartzzite	Polyester	24hrs		Engineered Bagged Screed allnex screed 20+	28 days		Concrete; Hi-strength : low water/cement ratio	28 days
Supascreed	Epoxy	24hrs		Engineered Bagged Screed allnex screed 20+	7 days		Concrete; Hi-strength : low water/cement ratio	7 days
Surecote 500/500AR	Epoxy	24hrs		Engineered Bagged Screed allnex screed 20+	7 days		Concrete; Hi-strength : low water/cement ratio	7 days
Nuthane	Epoxy	24hrs		Engineered Bagged Screed allnex screed 20+	24hrs		Concrete; Hi-strength : low water/cement ratio	2 days
Traxite Colourfine	Epoxy	24hrs		Engineered Bagged Screed allnex screed 20+	7 days		Concrete; Hi-strength : low water/cement ratio	7 days

- It is a very common for STZ Prefill systems to be used under resin floor toppings to create falls to drains and other filling applications.
- Normally for new work falls are laid in the concrete and fall to drains. However; in refurbishment the drains and falls are incorrect.
- Sometimes new drains are installed and require falls to be created or recreated.
- The prefills create falls of at least 1: 50 to ensure no ponding water.





HOW TO SPECIFY
STZ Prefill shall be used to create falls to drains or to make up heights.
STZ specifications only need to identify the floor topping. allnex and its contractors will provide compatible prefill.

FILM BUILD:
allnex Prefill can be installed to almost any thickness.

FALLS AND LEVELS:
Where falls are to be created using Prefill, we recommend a minimum fall rate of 1:50 to ensure adequate free-draining of liquids.

- Falls less than to 1:100 may also be suitable provided some ponding is acceptable. Refer: Fall Calculation Sheet

PREFILL MIX DESIGN:

Design System 1

PE Prefill - Polyester	Kgs
PE Prefill Resin	225.0
10mm Rounded Pebble	1093.0
Silica Sand	652.0
Approx. M^3 - $0.8m^3$	

Design System 2

Epoxy Prefill	Kgs
Epoxy Prefill Resin – (Resin and Hardener)	180.0
10mm Rounded Pebble	1120.0
Silica Sand	700.0
Approx. M^3 - $1.0m^3$	

Design System 3

CEMENT BASED PREFILL
Well formulated, low water/ cement ratio concrete may be used. - This may be modified with Araplex SBR to increase adhesion. Alternatively or for smaller areas: ***allnex Screed 20+*** may be used. Refer to Technical Literature Note Well Cementitious Prefills are weak in thin films and are not to be used circumstances where that is required.

PREPARATION:

Prior to the commencement of the contract it is the contractor's responsibility to inspect all areas to receive the Prefill and report any unsatisfactory conditions in writing to the main contractor or client for necessary correction.
Ensure concrete joints and expansion joints are controlled and managed and just not simply laid over.
Prepare the sub-base for maximum adhesion by grinding or blasting to a minimum of **CSP 7-8**

ADHESION:

The installer shall ensure that the prefill is fully bonded to the sub – concrete.

Note
K80 epoxy is the best option as the primer to ensure a strong bond when using cementitious systems.
STZ Resin Prefill systems will normally bond very strongly to well cleaned and prepared concrete and primed with the correct Primer for the chosen system.
All material to be used in conjunction with the Prefill system are to be stored correctly. Do not allow materials to become wet or subjected to temperature extremes.

APPLICATION:

Aggregates
Use only selected, graded, dust free, clean, dry aggregates to provide good filler to resin ratio with excellent compaction. I.e. no air holes or aeration.
Generally STZ Resin Prefill consists of very coarse rounded aggregates blended with fine silica type sand. Ratios of fine sand to coarse aggregates will vary and is dependent on grades and types selected.

Note
It is important that Prefill mixes are compact – highly filled, open, honeycombed or porous structured Prefill is unacceptable.

RESIN/BINDER:

Dependent on the selected Prefill System.
Install accurate profiles, screeds or lines etc. to ensure Prefill can be accurately installed.
This may be done in conjunction with a laser, level or other suitable device.
Once existing levels and proposed levels have been accurately defined, install Prefill.
Prefill is to be accurately installed using screeds and/or trowels to achieve maximum surface tolerances of +/- 3mm over 3m grid. During the installation of Prefill the installer shall constantly check his work to ensure accuracy.
Cement systems: Ensure good curing conditions including no direct sunlight, only low volume airflow etc.

INSTALLATION OF TOPPINGS OVER PREFILL:

The prefill will require the correct substrate preparation for the chosen Resin Flooring System prior to final flooring installation.

FALL CALCULATION SHEET

Note

Falls of 1:50 will have no ponding water and will comply with MPI requirements in processing facilities (no splash onto foodstuffs from ponding water on floor)

Falls of 1:100 will flow to waste but are likely to still have ponding and will need to be squeegeed off.

This Chart shows the height of the prefill at perimeter walls to achieve those falls.

Distance(metres)	1:50 Height (mm)	1:75 Height (mm)	1:100 Height (mm)
1	20.00	13.33	10.00
1.5	30.00	20.00	15.00
2	40.00	26.66	20.00
2.5	50.00	33.33	25.00
3	60.00	40.00	30.00
3.5	70.00	46.66	35.00
4	80.00	53.33	40.00
4.5	90.00	60.00	45.00
5	100.00	66.66	50.00
5.5	110.00	73.33	55.00
6	120.00	80.00	60.00
6.5	130.00	86.66	65.00
7	140.00	93.33	70.00
7.5	150.00	100.00	75.00
8	160.00	106.66	80.00
8.5	170.00	113.33	85.00
9	180.00	120.00	90.00
9.5	190.00	126.66	95.00
10	200.00	133.33	100.00
10.5	210.00	140.00	105.00
11	220.00	146.66	110.00
11.5	230.00	153.33	115.00
12	240.00	160.00	120.00
12.5	250.00	166.66	125.00
13	260.00	173.33	130.00
13.5	270.00	180.00	135.00
14	280.00	186.66	140.00
14.5	290.00	193.33	145.00
15	300.00	200.00	150.00
15.5	310.00	206.66	155.00
16	320.00	213.33	160.00
16.5	330.00	220.00	165.00
17	340.00	226.66	170.00
17.5	350.00	233.33	175.00
18	360.00	240.00	180.00
18.5	370.00	246.66	185.00
19	380.00	253.33	190.00
19.5	390.00	260.00	195.00
20	400.00	266.66	200.00

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