



A standard setting fibre reinforced highly flexible adhesive for use with porcelain, ceramic and natural stone tiles.

- Grout after 12 hours
- Light foot traffic after 12 hours
- Highly flexible & thixotropic
- Suitable for use with porcelain, ceramic and natural stone tiles
- Ideal for interior and exterior applications
- Ideal for use with large format slabs
- 15 mm bed thickness
- Suitable for use with underfloor heating

TECHNICAL FEATURES:

Validus Structa is a flexible standard setting thixotropic adhesive with high strength cements, graded particle size aggregates, special synthetic resins and additives.

Its formula has been specially developed to achieve an adhesive suitable for laying marble, natural stone, porcelain and ceramic tiles on a variety of surfaces including non-absorbent substrates. Validus Structa's is suitable for interior application on wooden surfaces subject to slight deformation including floorboards, chipboard and plywood overlays.

Highly thixotropic for wall applications, Validus Structa's extended open-time delivers maximum workability. Achieve bed depths up to 15mm thick while maintaining dimensional stability.

Open Time: 30 mins
Pot Life: 3 hours
Grout After: 12 hours
Walk on After: 12 hours
Full Service: 7 days
EN 12004 C2 TE S1

Per 20kg powder:
 Mix with 5.4L water

STORAGE:

The product must be stored unopened and sealed, in its original packaging in a cool, dry place.

SHELF LIFE:

Approximately 12 months from the date printed on the side of the packaging.

SUITABLE SUBSTRATES:

- Walls and floors
- Interior and exterior use
- Concrete and cement-based screeds, plasters and blocks
- Tile backer boards
- Heavy duty or trafficked areas
- Swimming Pools
- Terraces or balconies
- Flexible cement and polymer based waterproofing membranes
- Cement and Anhydrite based liquid or flow screeds*
- Wooden substrates and gypsum boards*
- On top of old wall & floor tiles*
- Standard or waterproof plasterboard*
- Elastomeric waterproofing membranes*

** Interior surfaces only and with prior application of an appropriate primer.*

N.B. On absorbent surfaces such as concrete and bricks a primer is recommended.

PRODUCT IDENTIFIERS:

Stock Code	Colour	Size	Packaging
7382	White	20kg	42 bags per pallet
7383	Grey	20kg	42 bags per pallet





CONSUMPTION:

The consumption of Validus Structa changes depending on the laying surface, system used and the trowel size.

As a guide:

Trowel Size (mm)	Consumption kg/m ²	
	Single Spreading	Double Spreading
6	7.0	3.5
8	9.0	4.5
10	12.0	6.0
15	17.0	8.5
20	24.0	12.0

The consumption varies according to the evenness of the substrate, and the trowel notch size deployed, and the laying/ bonding method.

Suggested tile size as table below:

Substrate	Tile Surface (cm ²)	Laying System	Trowel Size (mm)
Internal Floor	S < 1100	Single Face	8/10
Internal Floor	1100 < S < 3600	Double Face	10/15
Internal Floor	3600 < S < 10000	Double Face	20
External Floor	400 < S < 1100	Double Face	8
External Floor	1100 < S < 3600	Double Face	10/15/20
Internal Wall	S < 400	Single Face	6
Internal Wall	400 < S < 2000	Double Face	8/10
Internal Wall	2000 < S < 3600	Double Face	10
External Wall	S < 400	Double Face	6
External Wall	400 < S < 2000	Double Face	8/10
External Wall	2000 < S < 3600	Double Face	10

MAXIMUM TILE SIZES:

Maximum length of longest tile side:

- Internal Floor: 3600mm
- External Floor: 1200mm
- Internal Wall: 3600mm
- External Wall: 900mm





SUBSTRATE PREPARATION:

Before starting, all substrates must be clean, dry and strong enough to support the weight of the tiles, tile adhesive and grout.

Remove all dust, dirt, oil, grease and other contaminants that may affect adhesion.

Absorbent substrates and gypsum or calcium-sulphate based substrates should be primed with Validus Para prior to using Validus Structa. See Validus Para datasheet for correct application according to specific substrates.

- **Do not use on plastic or metal substrates or substrates which are subject to rising damp**

MIXING RATIO & PRODUCT PREPARATION:

As a guide for powder to water ratio, 20kg of Validus Structa requires approximately 5.4l of clean water.

Mix with a mechanical aid, such as a paddle mixer, until you achieve adhesive of a smooth and lump-free homogeneous consistency.

Allow the product to stand for about 5 minutes, then remix. The adhesive is now ready for use and must be used within 3 hours.

Only mix the quantity that you can comfortably use within the product's pot life. As a guide, 15 mins at 23°C and 50% RH.

Never add water to buy back lost fluidity as doing this will impair the final bond strength.

Product that has begun to set must be discarded.

INSTRUCTIONS FOR USE:

Validus Structa is best applied in a uniform layer, using a notched trowel to comb to a consistent depth, as is appropriate for the type of and size of tiles to be fixed. Validus Structa can be applied to a maximum bed thickness of 15mm.

Ensuring the adhesive remains fresh, bed tiles into the adhesive with firm, even pressure to achieve full contact between tile and substrate. Tiles must be back-buttered prior to installation to guarantee complete adhesive coverage, enhance bond strength, and eliminate voids that can lead to de-lamination or cracking—especially in high-traffic areas or wet environments.

Where risk is present, protect the surface from frost until the adhesive is fully set.

It is essential to leave a minimum joint of 3 mm between each tile. Tiling must align with structural expansion joints, which should be sealed with an elastic PU material. This also applies to all wall-to-wall and wall-to-floor junctions. Expansion and perimeter joints should be incorporated approximately every 20 m² to accommodate movement.

Clean surplus adhesive from the tiles and joints as soon as





possible, set adhesive will become increasingly difficult to remove.
Clean tools after use with water. Product for professional use only.

GROUTING:

Under ideal conditions, grouting may commence after 12 hours. The installation can accept light foot traffic after the same period. This time can vary depending on temperature and site conditions. Impervious surfaces may extend the set time.

In the first 48 hours after application, the adhesive does not withstand frost.

The area can be returned to full service after 7 days, depending on the tile format, substrate and environment temperature.

The recommended grout for use with Validus Structa is Validus Aspecto or Validus Resino.

CLEANING:

Tiling should be cleaned with a damp cloth or sponge when the adhesive has already started to set, to avoid dislodging tile covering during this process. Allow 48 hours after completion of tiling before cleaning with larger quantities of water.

PACKAGING:

Validus Structa is packaged in 20kg poly-lined paper bags.

STORAGE:

Validus Structa must be stored unopened and sealed, in its original packaging in a cool, dry place.

SHELF LIFE:

Approximately 12 months from the date printed on the side of the packaging.

PLEASE NOTE:

Validus Structa complies with complies with the requirements of Reg. (CE) N. 1907/2006 (REACH) - AII. XVII, 47.

Use of the product beyond the declared shelf life may increase the risk of an allergic reaction.

If you are unsure with any of our instructions, please consult our **Technical Department on 020 8778 9000.**

The information contained in this technical data sheet is given voluntarily and in good faith. It is to the best of our knowledge true and accurate; however it may contain information which is inappropriate under certain conditions of use. The company cannot accept responsibility for any loss or damage due to inappropriate use or possibility of variations of working conditions and of workmanship outside our control.





product technical specification

Classification EN 12004	C2 TE S1
Basis	Cement, aggregates, additives
Colour	Extra White and Grey
Apparent Mass Volume	1.25 kg/dm ³
Maximum Grain Size	0.5 mm
Storage and Duration	12 months in the original closed package in a cool dry place
Danger of Toxicity	No. The product may cause irritation to the eyes and skin due to presence of cement
Inflammable	No
Mixture Ratio	5.4 litres water per 20kg bag
Mixture Consistency	Creamy
Density of Paste	1.65 kg/dm ³
Application Temperature	From + 5°C to + 35°C
Pot Life	About 3 hours*
Open Time	30 minutes*
Vertical Slip according to EN 1308	< 0.5 mm
Maximum Thickness Application	15mm
Light Foot Traffic	12 hours*
Grouting	12 hours*
Full Service	7 days*
Final Hardening	28 days*
Adhesion (after 28 days)	> 1.0 N/mm ²
Adhesion after Warming	> 1.0 N/mm ²
Adhesion after Water Immersion	> 1.0 N/mm ²
Adhesion after Freeze-Thaw Cycles	> 1.0 N/mm ²
Deformability according EN 12004	2.6 mm
Temperature Resistance	From -30° C to +90° C
* at 23°C and 50% relative humidity	



health and safety data



H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
P261	Avoid breathing dust/fume/gas/mist/vapours/ spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
P312	Call a POISON CENTRE or doctor/physician if you feel unwell.
P403 + P233	Store in a well ventilated place. Keep container tightly closed.
P501	Dispose of contents/container in accordance with regulations on hazardous waste or packaging waster respectively.

Follow instructions in the material safety data-sheet for safe handling and use.

Technical Data Sheet Version Number: VA.SU.T01

The information contained in this technical data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.