

# STRATUM 779

Heavy duty epoxy resin floor screed

## DESCRIPTION

**STRATUM 779** is a three component, solvent free, epoxy floor screed, consisting of epoxy resin, amine hardener and graded quartz filler, designed for use in heavy duty industrial flooring applications. It has a trowel grade consistency that provides a dense waterproof, non-slip finish with excellent impact, abrasion and chemical resistance.

## USAGES

- Heavy industry plants and factories
- Vehicle factories, heavy equipment parking, military vehicle and armories
- Repair of damaged concrete floors and edges of expansion joints
- Heavy duty applications, turbine rooms and other heavy weight machineries

## ADVANTAGES

- Chemically resistant Mortar
- Fast easy application
- High abrasion and chemical resistance
- Low maintenance costs
- Hygienic, impervious and easily cleaned
- Available in different colors upon request
- High bond, stronger than concrete cohesive strength

## TECHNICAL DATA

STRATUM 779	Typical values
Compressive Strength (ASTM C579) @day 7	85 N/mm <sup>2</sup>
Tensile Strength (ASTM C307)	15 N/mm <sup>2</sup>
Flexural Strength	18 N/mm <sup>2</sup>
Pot life @25°C (ASTM D2471)	60 – 80 min
Abrasion Resistance After 20 min (ASTM C779)	0.3 mm
Bond Strength (ASTM D454)	2 N/mm <sup>2</sup>
Density (ASTM D1475)	2,000 kg/m <sup>3</sup>
Initial Hardness	6 hours
Full Cure	3 days
Minimum Laying Temp.	10 °C

## USAGE INSTRUCTIONS

### 1. Surface preparation

All substrates shall be sound, clean, free from dust, grease & oil, dirt, the concrete wet substrates should be sponge-dried to remove all free surface water.

And in case resin-based flooring or primer were applied more than 3 days prior to application of **STRATUM 779**, it is recommended to abrade the substrate with emery paper or grinder to provide a mechanical key prior to application.

Concrete floors should have compressive strength not less than 25 MPa. and if new concrete floor, it must be over 28 days old before applying any resin-based product.

Any cracks or grooves should be repaired before priming using **PIOMORTAR** range.

### 2. Priming

Apply one coat of **PIOPRIME 38** or **PIOPRIME 62** depending on concrete porosity, ensure that the surface to be primed is clean, dry and free from oil, grease or other contamination.

STRATUM 779	Coverage
PIOPRIME 38	9 m <sup>2</sup> /Liters
STRATUM 779	16 m <sup>2</sup> /pack/1 mm thick

## STANDARDS

**STRATUM 779** is formulated to comply with all requirements of BS EN476:2009 as class 1 in flame spread.

All coverage rates given are theoretical and subject to actual site conditions. We recommend trial areas are done to establish a practical estimation to material consumption.

### 3. Mixing

Stir component A only separately, then the entire content of component B could be poured into the component A container, both should be mixed for 1-2 minutes using mechanical mixer (drill mixer). Insufficient mixing may lead to color variation and bubble formation.

Empty the mixed resin into a suitable empty container with sufficient volume to accommodate the total yield of the material.

Add component C (Filler) to the mixed resin component (A+B) and mix for an additional 2-3 minutes until a uniform color & consistency is achieved.

### 4. Application

Apply the mixed material onto the prepared surface using a plastic or wood float. Spread out and tamp or compact to provide a dense topping to a minimum thickness of 5 mm, at a theoretical coverage rate of 1.6 m<sup>2</sup> per pack.

For large areas we recommend applying **STRATUM 779** in 5 mm thick accurate spots, in a 1.5-2 m grid cross the floor area, then spreading out and compacting using 3 m long straight edge to provide a dense and levelled surface.

Finish with a plastic float, wood float or steel trowel depending on the surface texture required.

The application should be carried out in a continuous operation without breaks, therefore, please ensure sufficient materials, equipment and labor are available to achieve. If the entire area cannot be finished in one go, we recommend creating day joints, or working to movement joints to provide a neat edge to work with the subsequent application.

Expansion joints must be reflected through the **STRATUM 779** and preferably sealed with a sealant from the **ENESEAL** range.

### 5. Cleaning

Clean all tools and application equipment with a suitable thinner immediately after use.

Hardened or cured material can only be removed mechanically.

## CHEMICAL RESISTANCE

STRATUM 779	Concentration
Chlorine	100%
Kerosene	100%
Gasoline	100%
Nitric Acid	40%
Sulphuric Acid	50%
Ammonia (Salt Water)	30%
Acetic Acid	30%
Detergents	100%
Alum	100%
Formic acid	40%
Hydrochloric Acid	50%
Phosphoric Acid	20%
Sodium Hydroxide	50%
Soda Solution	100%

## PACKAGING

**STRATUM 779** is supplied in 16 kg set, component A, B & C.

## HEALTH & SAFETY

Before applying **STRATUM 779**, all safety protections should be worn during application, such as safety goggles and rubber gloves to avoid any harmful accidents.

If **STRATUM 779** is splashed to skin, it must be washed off by water and soap at once, and if to the eyes seek medical attention immediately.

## STORAGE & SHELF LIFE

**STRATUM 779** shall be stored in its sealed container under dry and shaded place in a temperature from 5°C -35 °C, shelf life of the material is 12-months.

## TECHNICAL SERVICE

The technical service department of Arkaz is available to assist in the correct and best use of our products, these resources and advice are at your disposal entirely without obligation.

Please contact:  
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