

# HYCHEM SPECIFICATION

## TERRAZZACRETE CEMENTITIOUS OVERLAYMENT



### PRODUCTS

- Hychem GP primer
- Hychem Velosit SC240
- Hychem Velosit SL503/505/SC244

### SYSTEM DESCRIPTION

A customisable decorative, UV stable, hygienic and hard-wearing polished concrete overlayment.

Terrazzacrete uses an innovative and specially formulated cement which has significant benefits from standard competing Portland cement mixes commonly used. The Velosit binder used in Terrazzacrete hydrates the cement with 100% of the water in the mix which results in far less shrinkage and cracks while also allowing rapid curing and market leading compressive strength.

This allows Terrazzacrete to offer shorter application windows giving clients far quicker return to service. Coupled with the ability to use a wide range of aggregates and oxides Terrazzacrete also allows complete design customisation and market leading warranties.

### SYSTEM THICKNESS AND APPLICABLE SURFACES

Terrazzacrete can be used internally or externally at a minimum thickness of a 12mm finished floor. When using aggregates above 10mm Hychem should be consulted to confirm recommended thicknesses. As a general rule, the minimum thickness is 5mm greater than the largest aggregate size.

	MINIMUM POUR THICKNESS
INTERNAL	15MM
EXTERNAL	20MM

Applicable surfaces include concrete substrates, tiles and Hychem's de-coupled Soundstop sound insulation.

### SYSTEM SPECIFICATION

#### Preparation

The existing substrate is to be mechanically prepared through diamond grinding or shotblasting the surface to a minimum CSP3. The substrate must be firm, clean and dry with a minimum compressive strength of 25 MPa and a minimum surface tensile strength of 1.5 MPa.

Static cracks below 2mm should be cleaned and filled with Hychem GPT. Live cracks or substrates with high potential movement should be discussed with Hychem prior to application.

The Terrazzacrete standard specification detail includes aluminum edge strips around perimeters (can be covered with skirting if desired) and at entranceways. Aluminum angles may be suitable for expansion joints and control joints, the joint detail should be discussed with Hychem on a project specific basis.

#### Prime Coat

Apply Hychem GP at 5-7sqm/L and broadcast a dry 1mm sand aggregate to full coverage (no coating to be visible). Coverage rates may vary due to porosity changes in the concrete. For projects with short application windows Hychem have suitable rapid curing primers.

#### Overlayment application

Mix the selected Terrazzacrete binder (SL503,505,244) in a suitable mixing station. Begin by pouring the water into the mixing station and mixing with the pigment until thoroughly dispersed. The selected Velosit cement binder is then added and mixed thoroughly before adding the aggregate and continuing to mix for 2 minutes. Terrazzacrete is then poured to the nominated thickness with the applicator using suitable tools and techniques to accurately and consistently spread the material.

#### Mix ratios

PRODUCT	DESCRIPTION	ADDITIONAL AGGREGATE	COLOUR
20kg SC244	50MPa "self smoothing" binder with in built aggregates	Maximum 20kg	Natural grey or white with the option to add up to 10% pigment
20kg SL503	50MPa self-levelling binder	Maximum 20kg	Natural grey with option to add up to 10% pigment
20kg SL505	60MPa self-levelling binder	Maximum 20kg	Natural white with option to add up to 10% pigment

# HYCHEM SPECIFICATION



## TERRAZZACRETE CEMENTITIOUS OVERLAYMENT

### Grinding and polishing

The grinding and polishing process can begin within 24 hours depending upon the environment and products used. Standard Terrazzacrete will include 2-3 grinds or "cuts" followed by liquid grouting, polishing and densifying. The desired look and gloss level are project specific and Hychem should be consulted to discuss the custom grinding and polishing procedure.

### Floor Joints

Existing expansion joints shall be honoured with an aluminium edge strip or neoprene expansion joint capable of tolerating the expected movement. Each project will have a project specific joint detail depending on the joint movement expected, Hychem should be consulted to confirm the joint detail.

### Curing

	Terrazzacrete	Typical Portland cement product
<b>Foot traffic</b>	2-4 hours	4-24 hours
<b>Grinding and polishing</b>	1-2 days	7 days
<b>Sealing</b>	1-2 days	7 days

### OPTIONAL ADDITIONS

#### Screed or bulk fill levelling layer (if required)

When height tolerances need to be raised above 25mm Hychem have an economical SC240 bulk fill screed. For application of the screed, ensure the substrate is prepped to a minimum CSP2. Squeegee or rolldown GP epoxy primer at 7sqm/L with a full broadcast of 1mm dried sand. Once cured apply SC240 with Hychem screed sand to the nominated thicknesses (5mm-100mm). Once cured the Terrazzacrete can then be applied directly onto the screed following standard specification procedure.

#### Waterproofing membrane (if required)

Hychem WP101 negative pressure cementitious waterproofing can be used for waterproofing if required. Hychem must be consulted to discuss suitability on a project specific basis.

#### Sound insulation (if required)

Hychem Soundstop sound insulation can be combined with Hychem SC240 as a de-bonded screed prior to application of Terrazzacrete. Hychem should be consulted to confirm specification detail.

#### Subfloor heating (if required)

Hychem Terrazzacrete can be applied over subfloor heating in most cases, Hychem should be consulted to confirm specification detail.

### WARRANTY

A Hychem warranty is offered whenever a Hychem trained and approved applicator is used. The standard Terrazzacrete warranty is a 10-year material warranty. It is imperative to have a suitable cleaning and maintenance schedule to ensure longevity whenever using a polished concrete floor. Hychem will supply a project specific cleaning and maintenance schedule as part of a custom specification.



**PLEASE CONTACT HYCHEM TO DISCUSS A PROJECT SPECIFIC SPECIFICATION.**

Refer to Data Sheets for more specific information on product application, recoat windows and environmental information.

Application techniques and coverage may vary depending on actual site conditions.

Cleaning and maintenance schedule available upon request.

#### Field support

Field support where provided, does not constitute supervisory responsibility. Suggestions made by HYCHEM either verbally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they and not HYCHEM are responsible for carrying out procedures appropriate to a specific application.

#### Customer responsibility

The technical information and application advice given in this publication is based on the best information available at the time of print. As the information herein is of a general nature, no assumption can be made as to the product suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by Commonwealth or State Legislation. The owner, his representative or the contractor is responsible for checking the suitability of products for their intended use.