

# HY-FLAKE

A decorative, medium duty epoxy floor topping with good colour stability



**HYCHEM**  
EPOXY SYSTEMS

Hychem HY-FLAKE is a solventless, multi-layer, epoxy flooring finish utilising decorative vinyl-chip flakes as part of the installation process. The final finish is a decorative, multi-coloured, seamless & hard wearing epoxy floor topping which offers an ideal alternative to sheet vinyl flooring for areas where a more durable surface is required.

## USE

Hychem HY-FLAKE can be applied as a flooring system over new or old concrete wherever foot and light vehicular traffic is expected.

HY-FLAKE is ideal for use where a multi-coloured, decorative architectural finish is preferred to single coloured finishes for areas that require a seamless, chemically resistant, hygienic & hard wearing trafficable system.

## FEATURES AND BENEFITS

- Non yellowing and suitable for internal & external (with PU topcoat) applications
- Chemically resistant to petroleum oils, solvents, acids & alkalies
- Durable – 100% solids provides a 500 -2000 micron DFT
- Wear resistant – hard wearing even in harsh and punishing environment.
- Slip resistance – meets AS/NZ 4568, will meet R10 to R13 with selected anti-slip additives
- Solventless – non-flammable
- Odourless – can be used in retail situations without disturbing neighbouring businesses
- Aesthetic flexibility – available in a variety of colours & designs
- High gloss or satin finish – aesthetically pleasing, easy to maintain
- Can be applied to wall and coving surfaces as well

## SYSTEM

|                                      |  |
|--------------------------------------|--|
| PRIMING (if required)                | GPX EPOXY                                |
| or FIRST / PRIMER COAT (diluted 15%) | SF20 @ 6 sq/m per litre                  |
| REPAIRS                              | GPX mixed with Silica 60G                |
| SECOND COAT                          | SF20 @ 5 sq/m per litre                  |
| BROADCAST                            | Vinyl chip @ 3-5 sq/m per Kg             |
| EPOXY GLAZE 3                        | 5 sq/m per litre                         |
| Polyvac with 80 mesh pad             |  |
| EPOXY GLAZE 3                        | 7 sq/m per litre                         |
| EPOXY GLAZE 3                        | 8 sq/m per litre                         |
| Slip resistance ANZ4586:2004         | R10—R13 dependent on anti-slip aggregate |
| Colour stability                     | Excellent indoors                        |

## TYPICAL APPLICATIONS

- Bulk retail outlets, warehouses, offices, bathrooms
- Manufacturing & packaging areas
- Commercial & industrial environments
- Exhibition halls, retail outlets
- Prisons & police stations
- Hospitals & nursing homes
- Motor workshops & aircraft hangars
- Pharmaceutical plants
- Schools & colleges

## APPLICATION GUIDELINES

### Surface Preparation

- Concrete substrate shall be firm, clean and dry with a compressive strength of 25 MPa and surface tensile strength of 1.5 MPa minimum
- New concrete must be allowed to cure for a minimum of 28 days
- Repair imperfections (holes and cracks) with an epoxy patching compound such as Hychem GPX where necessary
- Remove surface laitance, contaminants, coatings, curing compounds and all weak and loose materials
- Prepare concrete surface by Diamond Grinding or light Shot Blasting to provide the appropriate surface profile for optimum mechanical keying

### Priming

- Priming is generally not required
- Where necessary, apply Hychem GPX by roller at a rate of 6 sqm/litre

## MIXING

Mix only enough quantity that can be applied within the work life which is temperature dependent

- For Hychem SF20 Neutral, add colour pigment into the Component A (Resin) and mix until homogeneous (1 minute) using a helical mixer at a speed of 500 rpm
- Mix Hychem SF20 liquid components (Resin & Hardener) together using a helical mixer at a speed of 500 rpm until the mix becomes homogeneous (1.5 to 2 minutes)
- Move the mixer around from side to side and top to bottom and scrape the sides of the mixing vessel to ensure thorough mixing

FOLLOW THE SAME PROCEDURE FOR EPOXY GLAZE 3

## APPLICATION (1000 microns approximately)

Where necessary, apply GPX as a clear primer using a medium nap roller at a coverage rate of 6 sqm per litre depending on the coarseness of the sub-floor surface. Allow to cure for a minimum of 12 hours or over-night but less than 24 hours.

- Apply first coat of [Hychem SF20](#) using a medium nap roller at a coverage rate of 6 sqm. Allow to cure as above.
- Apply second coat of [Hychem SF20](#) at a coverage rate of approximately 5 sqm per litre. Allow to cure as above.

### Vinyl chips

- Broadcast chips into the wet SF20 coating at the required coverage rate
- Sweep off loose vinyl chips
- Apply first coat of Epoxy Glaze 3 and once cured polyvac with 80 mesh pad

Slip Resistance is dependent on the size (grading) of aggregates used. As a guide only the following indicative R ratings apply:

- 80 mesh Alumina – R 11
- 36 mesh Alumina – R 12
- 24 mesh Alumina – R 13

Apply a second coat of Epoxy Glaze 3 and broadcast with anti-slip aggregate when wet. Once cured apply a final coat of Epoxy Glaze 3.

## CLEAN UP

Xylene can be used for cleaning tools and equipment before the mixed compound begins to harden.

## SAFETY PRECAUTIONS

- Wear gloves, eye protection and overalls during mixing and application.
- Ensure there is adequate ventilation and avoid breathing the vapour

## SHELF LIFE

12 months from date of manufacture, stored under shelter at 25°C in original un-opened container.

## WARNING – ENVIRONMENTAL CONDITIONS

Epoxy products are sensitive to the prevailing temperature and humidity at the time of application.

- High temperatures will shorten the pot life and application may become difficult due to insufficient time being available to lay the product.
- Low temperatures and high humidity will result in the epoxy reacting with moisture to produce a white powdery finish. The tendency to surface whiten depends on the hardener being used and is a common occurrence at temperatures below 16 degC. The use of epoxy coatings below 10 degC is not recommended as this blooming effect can generally not be prevented at temperatures below this point.
- The white surface finish does not affect the structural strength and on site performance but can affect the adhesion of further surface coats.
- Chemical spillage of acids and sanitizing agents may attack the pigments used in the coating and result in discolouration.
- Differing epoxy products have differing resistance to chemicals, always ensure that the correct product is chosen for the service environment to be encountered.

### NOTE: Customer responsibility

The technical information and application advice here given 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 products 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.

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