

product information

PACKAGING

The approximate yield of 20 Kg packs
10:11 Lit

SHELF LIFE

24 months if stored in original
unopened packs.

STORAGE

should be stored in clean ground over
plastic or wooden pallets out from direct
sun light and moisture at temperature
between +5°C to +35°C

DESCRIPTION

VYFLOW EX is a three-component, high flow, ultra-high strength epoxy grout. A special resin and hardener formulation plus patent pending DL Technology aggregate, sets the **VYFLOW EX** apart from competitive products.

VYFLOW EX has extremely high compressive strength, with ultra-low creep and outstanding Effective Bearing Area (EBA). DL Technology aggregate helps to greatly reduce the amount of dust released into the environment during mixing and handling.

TYPICAL APPLICATIONS

- Pumps and rotating equipment
- Wind turbine bases and crane rails
- Compressors and turbo-machinery
- Skid-mounted equipment
- Presses and stamping machines
- High dynamic load applications

FEATURES

- DL Technology aggregate minimizes dust
- Positive effective bearing
- Ultra-high early strengths, fast return to service
- User friendly placing characteristics
- Excellent bond, machinery to foundation
- >95% Effective bearing
- High chemical resistance
- Exceptional flexural and tensile strengths
- Very low creep
- Clean tools with soap and water

INSTRUCTION FOR USE

▪ Surface Preparation

New concrete must be a minimum of 28 days old. The concrete must be clean and rough. All oil, dirt, debris, paint and unsound concrete must be removed. The surface must be prepared mechanically using suitable equipment to give a surface profile of at least a CSP 5-7 in accordance with ICRI Guideline 310.2, exposing the coarse aggregate of the concrete. The final step in cleaning should be the complete removal of all dust and residue with a vacuum cleaner followed by pressure washing.

Then vacuum all water up and allow to dry completely. Acid etching is acceptable only when mechanical preparation is impractical.

It is recommended that only contractors experienced in the acid etching process use this means of surface preparation.

The salts of the reaction must be thoroughly pressure washed away. Allow the concrete to completely dry.

Note:

Even with proper procedures, an acid etched surface may not provide as strong a bond as mechanical preparation procedure. All concrete must possess an open surface texture with all curing compounds and sealers removed.

▪ Form Preparation

Forms must be liquid tight to prevent leakage, and they should be strong and well braced. To facilitate stripping, the forms should be coated with two applications of paste wax or each piece wrapped with polyethylene.

▪ Anchor Bolt Holes and Blackouts

Holes and blackouts must be cleaned of all dust, dirt and debris and allowed to dry. If the sides are smooth, roughen the hole with a stiff bristle wire brush or with a rotary brush hammer.

▪ Mixing

Mix parts A & B (resin & hardener) separately using a drill and mixing prop. Then pour the Part B into the Part A container. Mix for 2-3 minutes, scraping the bottom and sides of the container, to ensure proper chemical reaction. Do not whip air into the epoxy while mixing. After the epoxy has been mixed, directly pour all of the mixed resin into a horizontal shaft mortar mixer. Add Part C (aggregate) to the mixture, one bag at a time and mix for 2 to 3 minutes, until the aggregate is completely wetted out. Place immediately.

▪ Placing

Pour into anchor bolt holes and blackouts through a funnel or directly if space permits. When grouting plates, pour grout into the headbox and allow to flow under the plate. Straps pre-placed under the plate will aid in working the grout across. Grout can be placed at a minimum of 1" (25 mm) thick to a maximum of 6" (150 mm) per lift when placed in a large mass.

Note:

Bring all E3 -XTREME materials as well as foundation and baseplate as close to 75°F (23°C) as possible. Cold temperatures will significantly reduce flow characteristics and will increase the difficulty of baseplate grouting. Higher temperatures will increase initial flow but reduce working time

▪ Curing

VYFLOW EX requires no special curing procedures.

▪ Finish

If a smooth finish is desired, the surface of the grout may be brushed and troweled with a light application of **VYCON SOLVENT**.



TECHNICAL PROPERTIES

VYFLOW EX is tested under laboratory conditions @ 23°C:

Property	1 day	7 days	28 days	*Post cure
COMPRESSIVE STRENGTH ASTM C 579 2 IN (50 MM) CUBES @ 73°F (23°C)	16,000 psi (111.1 MPa)	17,500 psi (121.5 MPa)	18,000 psi (125.0 MPa)	19,000 psi (132.0 MPa)
COMPRESSIVE CREEP ASTM C 1181, 28 DAY CURE 400 PSI (2.8 MPA) @ 140°F (60°C)			1.9 x 10-3 in/in/°F	
FLEXURAL STRENGTH ASTM C 580	5,550 psi (38.2 MPa)	5,600 psi (38.9 MPa)	5,650 psi (39.2 MPa)	5,700 psi (39.6 MPa)
TENSILE STRENGTH ASTM C 307	2,000 psi (13.9 MPa)	2,100 psi (14.6 MPa)	2,400 psi (16.7 MPa)	2,500 psi (17.4 MPa)
BOND STRENGTH, ASTM C 882	N/A	3,300 psi (22.9 MPa)	3,900 psi (27.0 MPa)	
COEFFICIENT OF THERMAL EXPANSION ASTM C 531, 7 DAYS	2.2 x 10-5 in/in/°F (74 to 210°F) (23 to 99°C)			
EFFECTIVE BEARING AREA ASTM C 1339	>95%			
APPROXIMATE WORKING TIME ICRI PROTOCOL	32 minutes at 73°F (23°C)			
PEAK EXOTHERM 12 IN X 12 IN X 3 IN SPECIMEN (30 CM X 30 CM X 8 CM) ASTM D 2471	168°F (75.6°C) at 65 minutes			
CHEMICAL RESISTANCE	Excellent resistance to most industrial chemicals			
ABRASION RESISTANCE	Greater than concrete			
*Post Cure Procedure: De-mold specimens after 24 hours; place in oven @140°F (60°C) for 18 hours; remove from oven for 24 hours; test				



SPECIFICATIONS

VYFLOW EX complies with the following standards:

- CRD C 621, Corps of Engineers Specification for Non-Shrink Grout.
- ASTM C 1107, Standard Specification for Packaged Dry, Hydraulic-Cement Grout.
- British Standards for compression, bond and flexural.

CLEAN UP

Clean tools and equipment with suitable solvent immediately following. Clean drips with water while still wet. Dried **VYFLOW EX** will require mechanical abrasion for removal.

PRECAUTIONS

- Mixed epoxy resins will develop temperature during their curing period. This could result in heat generation and possible smoking if the material is unused and kept in bulk.
- Care should be-taken to use all mixed materials within the stated pot life or provide a well-ventilated place away from other materials until any exothermic reaction has taken place and the product can be disposed of properly.
- In the case of damp surfaces use heat gun to expel moisture.
- In the case of necessity to work with a different batch, apply one package and the color is checked before working with the rest of the quantity.
- Apply at temperatures (4°C) and rising.
- In all cases, consult the Safety Data Sheet before use.

TECHNICAL SUPPORT

For any technical support, please consult **VYCON** office or visit our website <http://www.vycon-eg.com>

HEALTH AND SAFETY

Take precautions to avoid inhalation of spray mist and contact with skin and eyes. wear suitable protective clothing gloves, eye protection. if skin comes in contact it should be washed with fresh water and soap. eyes contact should be cautiously washed with fresh water. the product non toxic and non hazardous according to health and safety codes



WARRANTY: **VYCON CONSTRUCTION CHEMICALS** warrants that; (1) its products will perform substantially in accordance with the accompanying written materials for a period 1 year from the date of receipt. (2) The product will be free from defects in materials and workmanship under normal use for 1 year. In case of any product fails to conform to this warranty, **VYCON** will replace the product with no cost to the client. **VYCON** doesn't authorize anyone to make any written statement which may change the installation information or instructions of the product data. The wrong installation of the product which fails to conform to the instructions shall void the warranty.