



MAXPATCH®



TWO-COMPONENT, PATCHING MORTAR FOR REPAIRING CONCRETE FLOORS AND CONTINUOUS DECORATIVE FINISH IN MINIMUM THICKNESS



DESCRIPTION

MAXPATCH® is a two-component product. Component A is an acrylic-based liquid resin, and component B is a mortar composed of a mixture of special cements, additives and well-graded aggregates. Once mixed, it provides an advanced mortar with high performance and mechanical properties (adhesion, abrasion resistance and compressive strength) suitable for restoration and patching of concrete floors, ramps, steps, etc., subject to pedestrian or heavy road traffic.

It is also available for continuous decorative and aesthetic finish, without joints, the type **MAXPATCH® FINO**, with smaller aggregate size,

to be used in thickness layer from 1 to 5 mm, on previously levelled substrates with **MAXPATCH®**.

APPLICATION FIELDS

- Restoration of paving and concrete floors, roads, loading areas and surfaces subject to high wear in warehouses, parking garages, truck docks, hangars, industrial facilities, etc.
- Patching of horizontal surfaces to be levelled or lifted.
- Repair and finishing of non-slip ramps with high resistance to traffic wear.
- Restoration of concrete steps and stairs.

ADVANTAGES

- Rapid return to service for light/heavy road traffic after 24 hours and 5 days, respectively.
- Allows layers from 5 to 25 mm thick.
- High mechanical strengths and wear-resistance.
- Good adhesion to concrete.
- Suitable for filling of voids or holes in floors.
- Allows whether smooth or anti-slip finish.
- Easy to use and good workability.

APPLICATION INSTRUCTIONS

Surface preparation

Remove all disintegrated or unsound concrete until achieving a structurally resistant substrate. Square cut or undercut the perimeter of the area to be patched to a depth of at least 5 mm. Avoid small or sharp angles in the edge of the patch. When repairing expansion joints, edge joints must be cut at least 30 mm of deep.

Surface must be thoroughly cleaned, free of dust, dirt, coatings, cement slurries, oil, grease or any other foreign material that could affect the adhesion. Use water blasting or equivalent mechanical means to clean concrete and provide an open textured surface.

Mixing

MAXPATCH® is supplied as a two-component pre-weighed set. Pour 3,5–4,0 litres of component A per 25 kg bag of component B into a clean container and then slowly add **MAXPATCH®** to the liquid, mixing by a slow speed electric drill (400-600 rpm) fitted with a disc mixer, for about 2-3 minutes until achieving a smooth, lump-free and homogeneous mortar. Allow the mixture to rest for 1 minute to fully wet out all the powder, and remix briefly before applying.

Mix only the amount of **MAXPATCH®** that can be placed in 20 minutes. After this time, mortar will have started its setting and will no longer be workable. If necessary, remix to keep the workability of the mortar but do not add more water.

Application

For an optimum adhesion prepare bonding slurry, mixing 5 parts of component B and 1 part of component A, until achieving a homogeneous consistency without any lumps. Apply the bonding slurry on the surface by brush **MAXBRUSH®** or broom **MAXBROOM®**.

Patches up to 25 mm thick:

When bonding slurry begins to lose brightness but is still fresh, start application of **MAXPATCH®** by trowel on the bottom and sides of patch with a maximum thickness per layer up to 25 mm. If slurry

dries up, or the previous layer is completely set, apply a new slurry coat to continue the job.

If several layers are required, provide a roughened surface to improve the adhesion of successive layers, i.e. each lift should be scored and allowed to set for 30 minutes before applying the next one.

Before the initial set of the mortar, level and trowel the surface to the desired finish. To provide a non-slip surface, comb slightly the surface with brush **MAXBRUSH**.

Patches deeper than 25 mm thick in single layer:

Add 8 kg of clean silica sand, free of fine particles, and with maximum size up to 10 mm, per each 25 kg of **MAXPATCH®**. Mix dry both compounds before adding the liquid. Use as mixing liquid a dilution composed of 1 part of resin component A and 1 part of water.

Add the enough mixing liquid to achieve a mortar with a workable consistency, but avoiding any excess which may cause bleeding or segregation. Apply by trowel with maximum thickness per layer of 50 mm.

Application conditions

Do not apply if rain or temperature below 5 °C is expected within 24 hours after application. Do not apply to frozen or frost-covered surfaces. Do not apply with temperatures above 40 °C.

At hot temperatures, low relative humidity and/or windy conditions, i.e. summer time, surface must be wet thoroughly with plenty of water prior to application.

Curing

With hot temperature (>30°C), windy conditions and/or direct sunlight, protect from quick drying the first 24 hours by spraying a fine mist of water, without washing out surface or by covering with polyethylene sheeting or damp burlaps. Do not use curing agent. Also a curing agent such as **MAXCURE®** can be applied.

Allow **MAXPATCH®** to cure for 24 hours, 48 hours and 5 days at 20 °C, before pedestrian traffic, light traffic and heavy traffic, respectively. Lower temperature increases the curing time.

Cleaning

All tools and equipments must be cleaned immediately with water after use. Once product hardens, this can only be removed by mechanical means.

CONSUMPTION

Application of pure product: estimated consumption of **MAXPATCH®** is 2,0 kg/m² per mm thickness. A 30 kg set fills a volume of about 15 litres.

Application by adding silica: a mixture consisting of 8 kg of sand per 25 kg bag of **MAXPATCH®** fills a volume of about 20 litres. Approximately 1,4 kg/m² per mm thickness of **MAXPATCH®**.

These figures are for guidance only and may vary depending on porosity, texture, substrate conditions and application method. Perform a preliminary test on-site to ascertain the total consumption exactly.

IMPORTANT INDICATIONS

- Do not add non-specified compounds to the mix.
- Do not use leftovers from previous mixes.
- Keep the recommended thickness per layer.
- For other uses not specified on this Technical Bulletin or further information, consult the Technical Department.

PACKAGING

MAXPATCH® and **MAXPATCH® FINO** are supplied as a two-component product. The resin Component A in 5 litre jerrycan or 25 litre jerrycan. The cement powder component B in 25 kg bag or 25 kg metal drum.

It is available in grey, pearl grey, red and green colour. Others colours available upon special request.

STORAGE

In its original packaging component A twelve months and component B twelve months in bag or eighteen months in drum respectively.

Store in a cool, dry and covered place, protected from moisture, freezing and direct exposure to sunlight at temperatures above 5 °C.

SAFETY AND HEALTH

MAXPATCH® is not a toxic product but is an abrasive compound. Avoid direct contact with skin and eyes, and breathing dust. Use rubber gloves and safety goggles during application. In case of skin contact, wash affected area with soap and water. In case of eye contact, rinse immediately thoroughly with clean water but do not rub. If the irritation persists, seek medical assistance.

Consult the Material Safety Data Sheet for **MAXPATCH®**.

Disposal of the product and its packaging should be carried out according to the current official regulations and it is the responsibility of the final user of the product.

TECHNICAL DATA

Product characteristics		
CE Marking, EN 1504-3		
Description. Polymer hydraulic cement mortar (PCC) for non-structural repair of concrete. Uses: Building and civil engineering works. Principles / Methods. Concrete restoration by applying mortar by hand (Principle 3-CR / 3.1)		
General appearance and colour of Component A	White milky liquid	
General appearance and colour of Component B	Grey powder	
Density of component A, (g/cm ³)	1,02 ± 0,05	
Density of component B, (g/cm ³)	1,30 ± 0,10	
Maximum aggregate size (mm)	MAXPATCH®	MAXPATCH® FINO
	< 0,8	< 0,4
Mixing ratio, (% by weight)	15 ± 1	
Application and curing conditions		
Minimum application temperature (°C)	> 5	
Pot life at 20 °C & 50 % R.H., (min)	20 – 30	
Waiting time between layers at 20 °C & 50 % R.H., (min)	> 30	
Curing time at 20 °C & 50 % R.H., (d)	1 / 2 / 5	
- Pedestrian traffic/ Light traffic / Heavy traffic		
Cured product characteristics		
Requirement for repair products, EN 1504-3 (Class)	R3	
Compressive strength at 28 days, EN 12190 (MPa)	31	
Flexural strength, (MPa)	10,5	
Chloride ion content, EN 1015-17 (% by weight)	≤ 0,05	
Adhesive bond on concrete at 28 days, EN 1542 (MPa)	2,9	
Carbonation resistance, EN 13295, d _k (mm). Control concrete 4 mm	1,0	
Elastic modulus, EN 13412 (GPa)	17,6	
Thermal compatibility	2,2 2,6 2,2	
- Part 1: Freeze-thaw, EN 13687-1 (MPa)		
- Part 2: Thunder shower, EN 13687-2 (MPa)		
- Part 4: Dry cycling, EN 13687-4 (MPa)		
Capillary absorption, EN 13057 (kg/m ² ·h ^{0,5})	0,01	
Slip/skid resistance value, UNE-ENV 12633 (Rd)	>45 / Class 3	
Chemical resistance	Intact / Unaffected	
Ca(OH) ₂ (10% by weight in water solution)		
NaOH (10% by weight in water solution)		
Lactic acid		
Fuel, Xylene, Methyl-ethyl-ketone, (SAE 30) Motor oil		
Citric acid (10% by weight in water solution)	Intact and abraded slightly	
Trichloro-ethylene		
Thickness / Consumption*		
Thickness per layer MAXPATCH® / MAXPATCH® FINO (mm)	5 – 25 / 1 - 5	
Consumption per layer as pure product (kg/m ² per mm thickness)	2,0	

* These figures are for guidance only and may vary depending on porosity, texture, substrate conditions and application method. Perform a preliminary test on-site to ascertain the total consumption exactly.

GUARANTEE

The information contained in this leaflet is based on our experience and technical knowledge, obtained through laboratory testing and from bibliographic material. **DRIZORO®, S.A.U.** reserves the right to introduce changes without prior notice. Any use of this data beyond the purposes expressly specified in the leaflet will not be the Company's responsibility unless authorised by us. We shall not accept responsibility exceeding the value of the purchased product. The data shown on consumptions, measurement and yields are for guidance only and based on our experience. These data are subject to variation due to the specific atmospheric and jobsite conditions so reasonable variations from the data may be experienced. In order to know the real data, a test on the jobsite must be done, and it will be carried out under the client responsibility. We shall not accept responsibility exceeding the value of the purchased product. For any other doubt, consult our Technical Department. This version of bulletin replaces the previous one.



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ES045396-1/ES045397-1

