

TECHNICAL DATA SHEET NOVACEM CREATIVE 5200103300747 Version: 10/2023. V.07

# **NOVACEM CREATIVE**



Cement-based binder for creating pebble coatings

- Suitable for interior and exterior walls and floors
- Suitable for permanent immersion in water
- High mechanical strength
- Excellent thixotropy and workability
- High resistance to aging

Description NOVACEM CREATIVE is a powdered cementitious hydraulic binder with natural and synthetic additives. Non-slip micro-pebble surfaces can be created by combining a variety of natural, synthetic, and recycled aggregates. Because of its excellent thixotropy and high mechanical strengths, cementitious decorative coatings are an ideal system for interior, exterior areas, and permanent immersion in water. VOC emission classification GEV-Emicode EC1PLUS, license number 11417/14.02.20 Uses NOVACEM CREATIVE can be used in application such as: • Textured, non-slip surfaces with natural optic · Furniture, tables, offices, benches For horizontal and vertical applications: • Exterior areas, landscape design, swimming pools, etc. • Interior areas, bathrooms and wet areas • Under floor heating floors • In areas with heavy traffic, showrooms, commercial centers, public buildings, or offices Furniture, tables, offices, benches For placement on various substrates such as: Concrete or screeds Existing coatings such as tiles, natural stones Mortars and masonry mortars Cement boards and gypsum boards (with a suitable primer)



### **Technical Data**

#### **Product Identity**

Form	Powder
Color	White & Grey
Chemical substance	Portland cement, special additives
Bulk density	1,0 ± 0,1 kg/L
Storage	12 months on dry area in the original sealed packaging

#### Characteristics

NOVACEM CREATIVE	30 kg	
Planocolor Granulates Thassos Mix	25 or 50 kg, depending on the composition	
Planocolor Granulates, decorative grainings	45 or 20 kg, depending on the c	omposition
Mixing ratio	15 – 17 L water a 100 kg	
Density of the mix	2,1 ± 0,1 kg/L	EN 1015-6
Dry density of the mix	2,0 ± 0,1 kg/L	EN 12190
Application temperature	from +5°C up to +35°C	
Workability	∻ 60 min/20⁰C	
Walkability	2 – 3 hours	

#### Final performance with 16% water/mix ratio

Compressing strength	≥ 35 N/mm <sup>2</sup>	EN 13892-2
Flexural strength	≥ 6 N/mm2	EN 13892-2
Adhesion	≥ 2,0 N/mm <sup>2</sup>	EN 13892-8
Chloride ion content	≤ 0,03 %	EN 1015-17
Capillary water absorption	$\leq$ 0,1 kg/m <sup>2</sup> $\sqrt{h}$	EN 1015-18
Water vapour permeability coefficient	µ ≤ 20	EN 1015-19
Thermal compatibility part 1	≥ 2,0 N/mm <sup>2</sup>	EN 13687-1
Reaction to fire	A1	EN 13501-1



## **Application Procedure**

Substrate Preparation	Concrete and cement mortars must be dry, sufficiently mature, and free from the risk of cracking. Furthermore, the surface must be free of dust, dirt, oils, grease, rust, and other elements that will interfere with adhesion. Remove all loose and friable sections of concrete or cement mortar until the substrate is compact and firm with a tensile strength of at least 1.5 N/mm2. Existing cracks should be repaired with two-component injectable epoxy adhesive EPO FLUID. Substrates with low mechanical strength must be reinforced with NOVAPRIMER or WATER PRIMER EPX, as needed.
	If the application takes place in a swimming pool, outside, or wet areas, waterproofing with SC ELASTIC, SC 200 PENETRATE, or SC ELASTIC EASY is recommended. Use EPO FLUID or an adhesive primer consisting of 1-part SBR 50, 1 part water, and 3 parts NOVACEM CREATIVE for monolithic bonding to the substrate and apply the mortar fresh on fresh to the adhesive layer.
	If the surface has been properly cleaned, it is recommended to pre-coat with PLANO CONTACT FAST on surfaces with low absorbency, such as old mosaics, well-fixed ceramic tiles, or marbles. Please refer to the Product Data Sheets for more information.
Preparation of the mix	Fill a suitable concrete or pan mixer with the required amount of water. Add NOVACEM CREATIVE to the water slowly while stirring, followed by the aggregates. Mix for at least 3 minutes, or until the mixture is completely homogenized and free of lumps. The mixture is now ready to be used.
Application	Using a flat spatula or trowel, apply the mixture. Final smoothing can be accomplished with finishing tools such as a flat metal trowel. The application thickness is determined by the maximum grain size of the aggregates used, with the minimum thickness being 2-3 times the aggregates' maximum grain size. When applying thicker coats, apply a second coat if the first does not stick to the hand.
	Under normal conditions, the mortar should be applied within 60 minutes of mixing. After this time, do not attempt to mix it with water again. Low temperatures prolong the life of the mortar, whereas high temperatures significantly reduce workability.
	Spray the surface retarder PLANOCOLOR CRT 052 within 30 minutes of applying the mortar. To bring out the decorative aggregates, rinse the surface with high-pressure water (100 to 180 bar) 12 to 24 hours after application, but no later than 3 days. If it rains during the waiting period, it is best to remove it right away. Mechanical cleaning agents such as antique marble brushes can be used to highlight the decorative aggregates. The type of antique brush used depends on the application and ranges from No. 60 to 180. Use a Scotch-Brite type sponge for small vertical surfaces. The waiting time is
	determined by the environmental conditions.



**Recommendations** 

Note: If the aggregates are dormant during the removal of the material from the surface, reduce the water pressure or wait a longer time.

It is recommended to use the mineral hardener/concrete densifier PLANOFINISH CH PLUS 24 - 48 hours after the completion of the cleaning and depending on the type of application in applications under difficult weather conditions. Floor applications should be protected with PROTECT 200, PROTECT 300S and/or WET PLUS S depending on the application requirements. When using NOVACEM CREATIVE inside swimming pools, it is not recommended to use a varnish or surface protection.

**Expansion joints** The location of each expansion joint is determined by the surface's use and the geometry of the space. The general rules for mortar manufacturing, as well as the guidelines of the BS 8204-3 standard, must be followed. An expansion joint is recommended in swimming pools at wall-to-floor and wall-to-wall joints, as well as every 40 - 45m<sup>2</sup>. Specific joints must be properly sealed, for example, with NOVAMIX PU 500 or NOVACOLOR HNR.

•	Apply in structurally stable and well-prepared surface
•	Avoid application with direct exposure to sunlight and/or strong wind as well
	as rain

- Once the mixture begins to set, do not add any more water or additives
- Do not apply to existing substrate expansion or movement joints
- Do not mix NOVACEM CREATIVE with gypsum, cement, resins, latex, or other binders
- Do not use on non-absorbent substrates such as metal, glass, old ceramic tiles, and mosaics without first applying an appropriate primer
- After 7-10 days, complete immersion in water
- Do not apply when temperature of the substrate and environment is lower than +5°C and higher than +35°C
- Do not apply directly to anhydride substrates, metal, flexible or high vibration surfaces
- It is not recommended to use different batches on uniform surfaces. Where
  a specific shade is required, mixing with NOVACOLOR OXIDE or NOVACOLOR
  UNIVERSAL in an appropriate proportion is recommended
- Use NOVACEM TERRAZZO to make polished mosaics
- Application must be done by professional applicators

ConsumptionThe consumption of NOVACEM CREATIVE is 0,6 kg/m²/mm of thickness.CleaningTools used during the preparation and application can be cleaned with water<br/>while NOVACEM CREATIVE is still fresh. If hardening occurs, cleaning can be<br/>done only by mechanical means.StorageNOVACEM CREATIVE remains stable for 12 months from production date inside<br/>its original sealed packaging, stored in protected dry area in temperature<br/>between +5°C and +35°C.



Packaging	Multi-layer paper bags of 15 kg.
Safety Instructions	For information and instructions regarding disposal and safe handling, users should refer to the latest Safety Data Sheet of the product containing ecological, toxicological and other safety related data.
Legal notes	The technical data and recommendations contained or listed in this leaflet are the result of laboratory measurements, of our current knowledge and experience. All the above-mentioned information and specifications should in any case be considered as indicative, as they may differ from each other. The Company makes every effort to ensure the accuracy of the information provided herein. Product specifications, prices and availability are subject to change without notice and may differ from those shown. In practice, variations in materials, substrates and on-site implementation conditions are such that no warranty can be given or implied, as to the merchantability or suitability of the materials for a particular purpose and for the exact conditions of each project. Anyone interested of using the product must be sure beforehand that the product is suitable for the intended use and in any case, the user is solely responsible for any consequences due to the use of the product. Among other things, the Company is not responsible for any normal wear or tear from environmental or other inappropriate conditions. We reserve the right to revise or change the data herein without prior notice. Restrictions and disclaimers apply to the extent permitted by applicable law. The Company has a Technical Support Department, which is the only one responsible for providing technical advice and solutions to deal with problems. Requests to the Technical Support Department are addressed and answered, only in writing. For the latest and a valid version of the Technical Data Sheet, the user of the material must refer to our website www.novamix.gr or directly to the QR Code of the product.

