
DESCRIPTION	SPEKTRON CR is an environmentally friendly single-component cement-based waterproofing compound containing special water-repellent agents. After mixing with water, the solution is applied to the prepared substrate in order to provide waterproofing and protect structures from water permeation. SPEKTRON has a high adhesion strength to concrete.
INTENDED USE	SPEKTRON CR waterproofing compound is designed for installation of waterproof coatings on non-deformable, non-saline mineral substrates located both inside and outside of buildings as well as for external and internal waterproofing of embedded and underground structures; for basement waterproofing; for waterproofing industrial water storage tanks; for waterproofing fountains, small monolithic baths of indoor pools, and drinking water tanks; for waterproofing inspection chambers; for waterproofing lift shafts and pits; for waterproofing wet rooms (bathrooms, showers, toilets, kitchens, industrial premises, etc.) to be clad with tiles; for protection of cooling towers, hydraulic engineering and water treatment facilities, tunnels and other concrete structures from moisture; for filling in holes and voids in masonry walls of old buildings; for interior and exterior applications.
SPECIAL FEATURES	SPEKTRON CR is easy to apply with a brush or spatula. After application and hardening, SPEKTRON CR forms a watertight waterproofing coating that is frost-resistant, resistant to salt and alkali attack and provides reliable protection of concrete and brick structures. Elastic waterproofing compound SPEKTRON 1K should be used on deformable foundations, terraces, and heated screeds. The waterproofing membrane should be protected against mechanical damage with tile cladding, cement-sand plaster or cement-sand screed that does not contain gypsum.
SUBSTRATES	SPEKTRON CR is recommended for use on the following types of substrates: stable cast-in-place and precast concrete structures; walls and structures made of red bricks, including those plastered with cement mortar; walls and structures made of small-piece ceramic and stone blocks, including those plastered with cement mortar; cement or cement-sand plasters; existing old tile floor or wall claddings (indoor only).
SURFACE PREPARATION	The substrate must be cleaned of dirt, grease, oils, bitumen, etc. mechanically, by sandblasting or with high pressure water. Fragile parts of the substrate, peelings, paint coatings, lime, cement-lime and gypsum plasters must be removed. Cracks must be pointed and filled in with an appropriate repair mortar. Before applying the waterproofing solution, the substrate must be dedusted and moistened with clean water until saturation, avoiding leaks and puddles.
SOLUTION PREPARATION	Mix in a clean container the required amount of clean water and 25 kg of dry mix SPEKTRON CR. When applied with a spatula: 4.75 - 5 liters of water per 25 kg of SPEKTRON CR; when applied with a brush: 5- 5.5 liters of water per 25 kg of SPEKTRON CR.
COMPOUND APPLICATION	Pour the dry mixture into water and continuously stir with a construction mixer having a special nozzle (400-800 rpm) until a homogeneous elastic solution without lumps is obtained. Let the obtained solution mature for 5-10 minutes. After re-mixing, the waterproofing compound is ready for use.
APPLICATION CONDITIONS	The works should be carried out in dry conditions at a substrate temperature ranging from +5°C to +30°C. The prepared solution can be applied with a medium-bristled brush or spatula. When applying, it is necessary to ensure maximum permeation of the solution into the substrate. The subsequent layers are applied crosswise with a brush or spatula on the hardened, but still wet, previous layer, until the required thickness of the waterproofing membrane is achieved. The thickness of each layer should be 1-2 mm. The optimum thickness should be 4 mm. Additional surface grinding will improve the surface quality and make cleaning easier (especially important for tanks). Protect the surface from rain, frost, wind and sunlight immediately after application.



THEORETICAL CONSUMPTION

From 3 to 6 kg/m², depending on the layer thickness.

SHELF LIFE

The guaranteed shelf life of the compound in a sealed package is not more than 12 months from the date of manufacture.

SAFETY MEASURES

When performing the works, use personal protective equipment to protect eyes, skin and respiratory organs. In case of contact with skin or mucous membrane of the eye, rinse with plenty of water. Consult a doctor if necessary.

PHYSICAL AND MECHANICAL CHARACTERISTICS OF THE SYSTEM

Parameter name	Parameter value
Appearance	Grey powder
Bulk density of dry mix	1.2+0.1 kg/l (1,200+100 kg/m ³)
Proportions for the preparation	When applied with a spatula: 0.19-0.20 l of water per 1 kg (4.75-5 l of water per 25 kg) When applied with a brush: 0.20-0.22 l of water per 1 kg (5-5.5 l of water per 25 kg)
Solution density	1.9+0.1 kg/l (1,900+100 kg/m ³)
Waterproofing solution consistency	Pastelike
Maximum size of aggregate and content of grains of maximum size	Not greater than 0.63 mm – not more than 5%
Water-retaining capacity	Not more than 95%
Primary mobility preservation time	60 min
Application temperature	From +5°C to +30°C
Maximum application thickness	4 mm
Adhesion strength after 28 days	> 1.0 MPa
Compressive strength	After 2 days ≥ 15 MPa After 28 days ≥ 30 MPa
Flexural strength	After 2 days ≥ 3.5 MPa After 28 days ≥ 4.5 MPa
Water permeability	Not less than 0.8 MPa
Water absorption when fully immersed and saturated with water for 48 hours, % of the total weight	Not more than 8%
Frost resistance	F 100
Thermal resistance 28 days after laying	From - 50°C to + 70°C
Consumption	From 1.6 to 1.8 kg/m ²
Optimum thickness	4 mm
Shelf life	12 months

