



INSTRUCTIONS FOR USE

«Modifier waterproofing «HydroEffect» F400 (1-1)

The additive is to be introduced into the construction and other cement containing materials for their protection, improvement of manufacturing technology and technical specifications of materials.

Why it is so important to use HYDROEFFECT?

As the properties of **HYDROEFFECT**, the reliability and durability of its effect turn this additive into a unique material on the world market.

A practical use of **HYDROEFFECT** brings the quality of treated materials at much higher level.

Following the test data after applying HYDROEFFECT the product acquires the following properties:

- plasticizing effect - 12 cm;
- compressive strength: in 28 days - no less than 125 - 130%; in 60 days after a frost resistance tests - 160%;
- water absorption - less than 1%;
- frost resistance - at least 300 cycles.

HYDROEFFECT also enhances the thermal insulation of the material and its resistance to icing, UV radiation, corrosive environments, pollution.

CONSUMPTION of HYDROEFFECT:

- 0.15 ... 0.3% of the cement weight (0.5-1.0 l/m³ of concrete).

APPLICATION AREAS:

- Airfield runways and highways, paving slabs;
- Concrete (monolithic, special, reinforced concrete, etc.);
- Other cement containing materials.

HOW TO USE:

HYDROEFFECT is added into the composition of the materials when dosing or mixing components.

WHY IT IS ECONOMICALLY PROFITABLE TO USE HYDROEFFECT?

- reduces expenditures for cement;
- reduces expenditures for various additives (as instead of several additives one uses only one - **HYDROEFFECT**);

NOTE: *When using **HYDROEFFECT** other supplements simply are not needed. However, if due to any reason there is still a necessity to use other additives along with **HYDROEFFECT**, it is mandatory to conduct preliminary tests for final properties of the resulting material.*

- reduces the cost of material's production.

To illustrate concrete advantages of **HYDROEFFECT** we give here the results of its impact on the formulas and properties of hydraulic concrete (for a variable water level zone).

	Standard concrete	Concrete with HYDROEFFECT
Consumption of Materials per 1m³ of concrete		
1. Cement M400	492 kg	300-350 kg
2. Water	204 kg	100-130 kg
3. Gravel	1092 kg	1200 kg
4. Sand	600 kg	850 kg
<u>Classes и Grades</u>		
5. Cement	M400	M400
6. Concrete Class	B25	B35-B40
7. Water-resistance mark	W8	W10
8. Frost resistance mark	F200	F300- F400
9. Workability	П3	П4-П5
<u>Additives</u>		
	Superplasticizer C-3-1.5kg Densifier (HK) - 5 kg Water-repellent (ГКЖ-11К) - 1 kg	« HYDROEFFECT » - 0.5-1kg