



# TECHNICAL SHEET



Product name:

**FLEXIDEN 35**

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Date: 13.4.2016

<b>Characteristics:</b>	Elastic water-thinnable acrylic paint
<b>Description:</b>	<p>The coating applied in a sufficient thickness covers the cracks emerged in the substrate and forms a sufficient barrier against the penetration of carbon dioxide, sulfur dioxide and chloride salts into the substrate, thus protecting the substrate as well as the steel reinforcement in the concrete against corrosion.</p> <p>The paint features excellent dry and wet adhesion to silicate substrates, resistance to UV-radiation and weather conditions. The binder used features the capability of surface netting through the effect of UV radiation, which ensures a low dirt collection of the coating and its color fastness. The coating is very elastic even at temperatures below the freezing point.</p>
<b>Composition (general):</b>	Mixture based on acrylic dispersion
<b>Application:</b>	It is used for the protection of reinforced-concrete structures, fiber-cement, cement-bonded fiber and glass-cement components (protective and decoration coatings of reinforced-concrete structures, e.g. bridges, silos, cooling towers, above-ground concrete tanks, chimneys, columns, poles, protective and noise control walls). It is also recommended for substrates where some cracks have occurred or where their occurrence is expected (facade painting...).
<b>Colors:</b>	It is produced according to the color chart of the manufacturer and in the specific colors EUROTREND, NCS and RAL or as agreed.
<b>Properties:</b>	<b>Paint:</b>
<b>Density (g/cm<sup>3</sup>):</b>	1.3 – 1.4
<b>Volume solids ONL (%):</b>	50 - 55
<b>Weight solids (%):</b>	65 - 70
<b>KU viscosity:</b>	80 - 120
<b>Flow time by use of flow cups F6 (s):</b>	> 120
<b>pH (at 20 °C):</b>	8 - 10
<b>VOC (volatile organic compounds) (kg/kg):</b>	0.03
<b>0.006 TOC (total organic carbon content) (kg/kg):</b>	0.02
<b>Maximum permissible value of VOC content (g/l):</b>	140
<b>Max. VOC content in the product in the ready-to-use condition (g/l):</b>	42
<b>Water-thinnable paint category:</b>	A/i single-pack paints with a special function.
<b>Appearance/color:</b>	Very thick liquid / according to the color
<b>Gloss value (at 60°):</b>	4.4
<b>Miscibility:</b>	The mixture is indefinitely miscible with water.
<b>Drying, degree 1 (surface dry):</b>	40 min.
<b>Drying time, degree 2 (dry to touch):</b>	1 hr 45 min.
<b>Drying time, degree 4 (dry-through):</b>	>24 hrs
<b>Consistency by tearing test without movement (MPa):</b>	> 0.8
<b>Sound absorption (Db):</b>	5 (coating on the LIAPOR panel)
<b>Water vapor permeability - class I. (m):</b>	Sd < 5 *
<b>Carbon dioxide permeability (m):</b>	> 50
<b>Liquid water permeability (kg/m<sup>2</sup> . h<sup>0.5</sup>):</b>	w < 0.1 *
<b>Impact resistance - class III. (Nm):</b>	> 20 *
<b>Abrasion resistance - weight loss (mg):</b>	< 3000
<b>Crack-bridging ability - class A3 (mm):</b>	> 0.5 *
<b>Reaction to fire:</b>	Class F
<b>Release of dangerous substances:</b>	refer to the safety data sheet of the product
<b>Chemical resistance:</b>	to frost and 3% solution NaCl (Road and Motorway Directorate)
*) - tested as a part of coating systems	



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<b>Substrate preparation:</b>	The substrate must be solid, coherent, dry, free from any mechanical and greasy impurities, and residues of old paint incoherent with the substrate. Heavily contaminated substrates are recommended to be washed with pressure water. The substrates should be impregnated with PRIMER B or DENAFLUOR P. Larger cracks and unevenness in the substrate shall be filled with a polymer cement mortar, smaller cracks shall be filled with an elastic acrylic sealant (e.g. OSTAFLEX).																
<b>Application conditions:</b>	The air and substrate temperatures during the application and drying of the paint shall not fall below +5 °C.																
<b>Thinning:</b>	The paint is supplied in a very thick consistency allowing the application in great thickness. It should not be thinned before application.																
<b>Recommended method of application:</b>	With a paint brush, a paint roller or spray painting																
<b>Recommended coating system:</b>	1 x penetration paint PRIMER B and 2 x FLEXIDEN 35. 1 x penetration paint DENAFLUOR P and 2 x FLEXIDEN 35.																
<b>Application data:</b>	The paint should be applied with a paint brush, a paint roller or spray painting in two or three layers, with a minimum time lag between coatings of 12 hrs.																
<b>Spreading capacity and recommended thickness:</b>	For common decorative coatings, an optimum thickness of 80 µm (dry layer / 1 coating) is recommended. For covering substrate cracks (approx. 1 mm), a minimum thickness of the coating of approx. 250-300 µm is required. <table border="1"><tr><td>Wet-film thickness WFT (µm)</td><td>160</td><td>500</td><td>600</td></tr><tr><td>Dry-film thickness DFT (µm)</td><td>80</td><td>250</td><td>300</td></tr><tr><td>Theoretical spreading rate (m<sup>2</sup>/kg)</td><td>3.0-5.0</td><td>1.2-1.4</td><td>1.0-1.1</td></tr><tr><td>Theoretical spreading rate (kg/m<sup>2</sup>)</td><td>0.2-0.3</td><td>0.7-0.8</td><td>0.9-1.0</td></tr></table>	Wet-film thickness WFT (µm)	160	500	600	Dry-film thickness DFT (µm)	80	250	300	Theoretical spreading rate (m <sup>2</sup> /kg)	3.0-5.0	1.2-1.4	1.0-1.1	Theoretical spreading rate (kg/m <sup>2</sup> )	0.2-0.3	0.7-0.8	0.9-1.0
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<b>Packaging:</b>	Plastic packages of 1,5 kg - 200 kg.																
<b>Storage:</b>	Store in original, well-closed containers in cool, dry and well-ventilated areas at a temperature from +5 to +25 °C. Protect from freezing. Keep the mixture separated from drinks, foodstuff, feedstuff and medicine. Store away from the reach of children. The shelf life is a minimum of 12 months from the date of manufacture. The product must not freeze.																
<b>Disposal of packaging and waste:</b>	Product residues and contaminated packaging shall be disposed of as hazardous waste in accordance with the applicable regulations.																
<b>Safety and hygiene:</b>	Observe the principles of personal hygiene. Ensure good ventilation of the workplace. During application, wear respiratory protection. If on the skin, wash the affected areas with water and soap. If in the eyes: rinse with water. If swallowed, rinse mouth with water, do not induce vomiting. In case of health difficulties, seek medical attention.																
<b>Legislation, certificates, attestations, other</b>	Conforms to the requirements of the ČSN EN ISO 1504-2 standard: Surface protection systems - coatings Declaration of Properties No. 002 Label:																



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tested parameters:



1020

DENAS COLOR a.s., Sokolovská 1174/17, Bílovec

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1020-CPR-010-025990

EN 1504-2:2004

Surface protection systems - coatings

**FLEXIDEN 35**

Abrasion resistance - weight loss: < 3000 mg

Carbon dioxide permeability: > 50 m

Water vapor permeability - class I: Sd < 5 m

Liquid water permeability:  $w < 0.1 \text{ kg/m}^2 \cdot \text{h}^{0.5}$

Consistency by tearing test, without movement: > 0.8 N/mm<sup>2</sup>

Crack-bridging ability - class A3: > 0.5 mm

Impact resistance - class III: > 20 Nm

Reaction to fire: class F

Release of dangerous substances: see the Safety data sheet

Declaration of Properties No. 001 **002**