

# CEM II/A-LL 42,5 R

## Portland Limestone Cement

**Ideal cement  
also for concrete  
block paving**



Rapid-setting cement suitable for the production of high - strength concrete and for structures or concrete elements requiring a rapid increase in initial strength. The higher development of heat of hydration also makes it suitable for concreting at lower ambient temperatures. Limestone provides the cement with a lighter color and low bleeding of the resulting concrete.

### Characteristics

CEM II/A-LL 42.5 R is a cement made by finely grinding Portland clinker, limestone (6 – 20% according to EN 197 – 1) and gypsum. It achieves high initial 2-day strengths in the range of 26 to 30 MPa and normalized 28-day strengths of 54 to 58 MPa.

### Use

- concrete for demanding concrete structures
- concrete elements and structures requiring rapid increase in initial strength
- prefabricated concrete elements of more complex shapes and building components (paving, permanent formwork, curbs, ...)
- plain concrete and reinforced concrete of higher strength classes
- cement screeds and mortars

### Advantages

- rapid increase in initial strength and high final strength
- excellent workability and rheological properties
- higher development of hydration heat

### Quality

The quality of cements is supervised by the TSÚS (Building Testing and Research Institute), Bratislava. CEMMAC is a holder of an ISO 9001: 2008 quality management certificate and an ISO 14001: 2004 environmental management certificate.

Essential Properties	Harmonized Standard STN EN 197-1	CEMMAC CEM II/A-LL 42,5 R
2-day compressive strength (MPa)	$\geq 20$	26 – 30
28-day compressive strength (MPa)	$42,5 \leq 62,5$	54 – 58
Initial setting time (min)	$\geq 60$	$200 \pm 30$
Soundness - Le Chatelier (mm)	$\leq 10$	0,0 – 2,0
SO <sub>3</sub> sulphate content (%)	$\leq 4,0$	2,6 – 2,9
Chloride content (%)	$\leq 0,10$	0,05 – 0,09

### Strength development

