



ÇİMSA

CEM II/A-LL 42.5 R
IZO POWER 42,5
●●●●●

IZO POWER 42,5



CEM II/A-LL 42.5 R



LASTING STRENGTH, ECO-FRIENDLY SOLUTION

50
KG



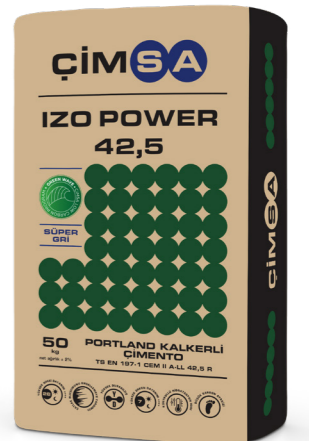
Çimsa Izo Power 42.5 Portland Limestone Cement has been developed to meet the requirements of all concrete strength classes. Thanks to its limestone content, it provides enhanced workability and improved consistency retention in concrete production. While delivering strength and durability performance equivalent to Portland cement (CEM I 42.5 R), its fine filler material ensures lower greenhouse gas emissions, offering a more sustainable solution. With its ability to provide stable final strength, it is a reliable choice for all types of concrete applications such as residential buildings, bridges, tunnels, viaducts, and road pavements. Its compatibility with all typical concrete admixtures allows for safe and versatile use across different applications. Demonstrating superior performance in ready-mix concrete and construction chemicals production, it stands out as an ideal solution for modern projects.

ÇİMSA IZO POWER 42.5 (CEM II/A-LL 42.5 R) PORTLAND-LIMESTONE CEMENT IS MANUFACTURED IN COMPLIANCE WITH TS EN 197-1:2012 AND IS CHARACTERIZED BY THE FOLLOWING PROPERTIES:



Chemical Properties	Çimsa Values (%)	Standard Limits (EN 197-1)	
		min	max
Insoluble Residue	0,4 - 0,6	-	5,0
SiO ₂	18,0 - 20,0	-	-
Al ₂ O ₃	4,0 - 5,0	-	-
Fe ₂ O ₃	2,5 - 3,0	-	-
CaO	59,0 - 64,0	-	-
MgO	1,5 - 2,5	-	-
SO ₃	2,60 - 3,20	-	4,0
Loss On Ignition	6,0 - 8,5	-	-
Na ₂ O	0,1 - 0,5	-	-
K ₂ O	0,8 - 1,0	-	-
Chloride (Cl)	0,01 - 0,04	-	0,10

Physical Properties	Çimsa Values (%)	Standard Limits (EN 197-1)	
		min	max
Specific Gravity	3,05 gr/cm ³	-	-
Specific Surface (Blaine)	4200-5200 cm ² /gr	-	-
Initial Setting	120 - 190 minutes	60	-
Final Setting	200-250 minutes	-	-
Water	26-28%	-	-
Volume Constancy (Le Chatelier) 1,0 mm		-	10
0,045mm Retained Material	0,5-2,0%	-	-
2 - Day Compressive	27-33 MPa	20	-
28 - Day Compressive	47-51 MPa	42,5	62,5



ADVANTAGES



HIGH FINAL STRENGTH

By providing high compressive strength at 28 days, it forms a solid foundation for long-lasting structures. It can be confidently used in the design of all concrete classes. Çimsa Izo Power 42.5 demonstrates stable strength performance equivalent to Portland cement.



HELPS PREVENT, CRACK FORMATION

The fine filler material in Çimsa Izo Power 42.5 improves the resistance of concrete against shrinkage cracks. This helps prevent aesthetic defects on the surface while supporting the long-term performance of the concrete.



HIGH DURABILITY

Thanks to its special composition that enhances durability, Çimsa Izo Power 42.5 delivers superior performance under challenging environmental conditions. By improving impermeability, it ensures long-term protection against water and chemical effects. It is a reliable choice for bridges, viaducts, tunnels, and road pavements where high durability is required.



HIGH EARLY STRENGTH

With its high compressive strength at early ages, structural elements quickly gain load-bearing capacity. Rapid strength development within the first 7 days accelerates the formwork cycle, offering advantages in projects with critical timelines.



CONTROLLED HYDRATION HEAT

The controlled development of hydration heat in Çimsa Izo Power 42.5 minimizes the risk of cracking in mass concrete applications and supports the long-term durability of structures. This makes it a safe solution for large-scale projects such as dams, foundations, and infrastructure works.



LOW CARBON FOOTPRINT

Produced with reduced clinker content thanks to its pozzolanic components, Çimsa Izo Power 42.5 results in lower CO₂ emissions during production. Its eco-friendly nature contributes to sustainable construction practices.



Afyon Plant

Halımoru Köyü, Halımoru sok. No: 269

Afyonkarahisar/Merkez

T: (272) 220 80 00

F: (272) 214 72 09

ÇİMSA