Technical Data Sheet

Tecnocem 42,5 R

CEM II/A-LL 42,5 R



Description

Tecnocem A-LL 42,5 R is a Portland limestone cement type II featuring high normalised strength and high early strength.

Composition

In compliance with the chemical composition requirements specified in EN standard 197-1, Tecnocem 42,5 R has a clinker content ranging from 80% to 94% by cement mass excluding calcium sulphate and additives, while the remaining percentage is made up of limestone with TOC \leq 0,20% by mass (LL) and minor constituents, if any.

Applications

High compressive strength, particularly at early ages, makes the product the best option for:

- prefab structures (with and without heat curing);
- cast-in-place prestressed structures;
- tall or slender non-prestressed structures;
- fair-faced concrete elements;
- elements and/or casting operations that require fast mold/formwork removal times;
- · street furniture pieces;
- dry-mix products

Benefits

Drying shrinkage and hydration heat being low with respect to strength development, the product comes as the best choice for challenging construction projects where the use of a cement of higher class might cause inconveniences in the presence of critical thicknesses.

The ability to gain high strength in very short times is advantageous in that the product can be used as a replacement for a lower class cement if low ambient temperatures are expected during the construction phase.

Standard requirements (UNI EN 197-1)

Chemical requirements*

Sulphates (as SO ₃)	≤ 4,0%
Chlorides	≤ 0,10%

Physical requirements*

Initial setting time	≥ 60 min
Soundness	≤ 10 mm

Mechanical requirements*

Compressive strength	at 2 days		≥ 20,0 MPa
	at 28 days	≥ 42,5 MPa	≤ 62,5 MPa

^{*}Characteristic values

Packaging and storage

The product's shelf-life is specified on the delivery note and possibly, if available, on the bag.

For professional use only. The user is advised to conduct tests and assessments in order to define the suitability of the product for the intended application.

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