

Portland CEMENT PA-L 42.5

Production Sites

Main Road Sibline,
Shouf, Lebanon

Packaging

Bulk
Bag :50kg



Properties	PA-L 42.5 is a Portland cement which belongs to the category of cement type PA- with addition of 6/15 % Limestone. It is general-purpose cement suitable wherever the special properties of other types are not required. Finely ground limestone can contribute to development of microstructure, particularly when fineness and chemistry of the finished cement are optimized. Mechanisms affecting performance include improved particle packing, establishment of nucleation sites for cement hydration, and reaction with calcium aluminate phases in the Portland cement clinker or supplementary cementitious materials to form calcium carbo-aluminate.
Principal Applications	Its uses in concrete include General construction (most buildings, bridges, pavements, precast units, floors, reinforced concrete buildings, tanks, reservoirs, pipe, masonry units and various concrete products).
Conformity to Norms	Portland Cement PA-L 42.5 is certified by IRI [Lebanese Institute of Industrial Research] and conforms to Lebanese Norm NL-53:1999 and EN 197-1 CEM-IIA/L 42.5 N
Mechanical Requirements	The conformity of the compressive strength is verified according to EN-196-1 <ul style="list-style-type: none"> o The Compressive Strength at 2 days shall be $\geq 12.5 \text{ N/mm}^2$ o The Compressive Strength at 28 days shall be $\geq 42.5 \text{ N/mm}^2$ and $\leq 62.5 \text{ N/mm}^2$ o The setting Time ≥ 75 minutes o Fineness Blaine $\geq 3000 \text{ Cm}^2/\text{g}$ o Soundness (le Chatelier) $\leq 10 \text{ mm}$
Chemical Requirements	<ul style="list-style-type: none"> o Moderate $\text{SO}_3 \% \leq 3.5\%$ o Chloride Content $\% \leq 0.1\%$
Specific Properties	PA-L is a slightly modified version of Portland cement that improves both the environmental footprint (due to lower carbon footprint) and potentially the basic performance of concrete (Rate of early hydration due to limestone acting as a filler). <ul style="list-style-type: none"> o Concrete made with PA-L has excellent placing and finishing properties. In general, water demand and setting time are almost the same as in comparison with Ordinary Portland Cement. When used in concrete, No special admixtures or dosage changes are needed. There are simply no operational distinctions compared to Ordinary Portland Cement.
Quality Control	Sibline Cement laboratory performs continual (24h/24h) control on chemical, physical, and mineralogical phases analysis of the fabricated and delivered Cement. It is equipped with state of the art technology and is certified to ISO 9001:2015 PA-L Cement produced in Sibline is certified by IRI and the laboratory is audited and certified on a yearly basis by BUREAU VERITAS.
Instructions for Use	<ul style="list-style-type: none"> o Special caution is advisable when casting concrete below 5°C and above 40°C. o For fresh concrete avoid quick drying out by protecting the surfaces against wind and sunlight by covering or wetting.
Safety Precautions	Portland cement is a light gray powder that poses little immediate hazard. A single short-term exposure to the dry powder is not likely to cause serious harm. However, exposure to wet Portland cement can cause serious, potentially irreversible tissue (skin or eye) destruction in the form of chemical (caustic) burns or an allergic reaction. The same type of tissue destruction can occur if wet or moist areas of the body are exposed for sufficient time. Users should avoid eye contact, skin contact, inhalation, and ingestion.

