AN ISO 9001:2015 CERTIFIED COMPANY



Penden Cement Authority Ltd.



Concrete solution for any construction



PENDEN PREMIUM

Penden Premium Cement is the brand name of Portland Pozzolana Cement (PPC) manufactured at Penden Cement as per IS 1489 (Part 1)-2015, using 74-76% in-house produced high quality Portland clinker, world's purest mineral 3-5% gypsum sourced from Pemagatshel in Bhutan and 17-23% Fly ash. Fly ash that is abundantly available from Thermal Power Plants and containing highly reactive silica when added in cement produces technically superior concrete in terms of durability, besides being environment friendly. Due to its ultimate performance properties in concrete, today Portland Pozzolana Cement dominates more than 50% of market share world over including our own immediate neighborhood.



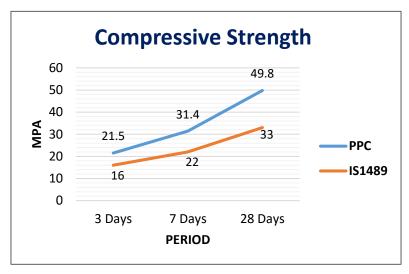
| Setting Time | Standard | PPC |
|---------------------|---------------------------|-------------|
| Initial | Not less than 30 minutes | 120 Minutes |
| Final | Not more than 600 minutes | 171 Minutes |

Its Preferential Usages:

- Used in all places
- ➤ Hydraulic structures
- ➤ Mass concreting works
- ➤ Masonry mortars and plastering

Advantages:

- More in bulk volume
- ➤ Gains compressive strength with age due to secondary hydration
- ➤ Highly resistant to sulphates
- ➤ Better workability during preparation of concrete
- ➤ Low heat during setting
- ➤ High tensile strength
- > Resistant to expansion



PENDEN SPECIAL

Penden Special Cement is the brand name of Portland Slag Cement (PSC) manufactured at Penden cement as per IS 455-2015, using 45-56% in-house produced high quality Portland clinker world's purest mineral 3-5% gypsum sourced from Pemagatshel in Bhutan and Granulated Blast furnace 40-45% Slag. Granulated Slag that is abundantly available from Steel industries and containing high reactive silica when added in cement produces technically superior concrete in terms of durability, besides being environment friendly. Due to its ultimate performance properties in concrete, today Portland Slag Cement is widely used world over. Better Workability and Higher Pot Life, Higher Later Compressive Strength, Low Heat of Hydration Cement, thus no thermal cracking due to temperature gradient Alleviates Alkali Silica Reaction in the concrete. Produces Dense Concrete as a result of secondary hydration process, which is more resistant to sulphate, chloride and Acid attacks.



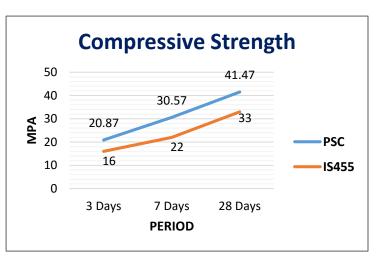
| Setting Time | Standard | PSC |
|---------------------|---------------------------|-------------|
| Initial | Not less than 30 minutes | 136 Minutes |
| Final | Not more than 600 minutes | 193 Minutes |

Its Preferential Usages:

- Used in mass concreting works
- ➤ Marine structures

Advantages:

- ➤ Slag cement is cheaper than OPC
- ➤ Higher compressive and flexural Strengths
- ➤ Lower permeability
- ➤ Resistance to aggressive Chemical attacks
- ➤ More consistent plastic and hardened properties
- ➤ Lower Heat of hydration
- > Better sulphate resistance



PENDEN SUPREME

Penden Supreme Cement is the brand name of 43 Grade Ordinary Portland Cement (OPC) manufactured at Penden Cement as per IS 269-2015, using 95-97% inhouse produced high quality Portland clinker and world's purest mineral 3-5% gypsum sourced from Pemagatshel in Bhutan. Ordinary Portland Cement (OPC) is the oldest type of building material – cement produced by human kind artificially. However, due to low conversion factor from basic raw materials to final product (cement) production volume, the sustainability of manufacture of this type of cement is at stake with respect to raw materials consumption and conservation strategies and related environmental issues. As a result, this type of cement has become rare commodity in the market and is available for very specific purpose only. Therefore, today Penden Cement maintains the production of Penden Supreme in its product range only for very special and specific applications.



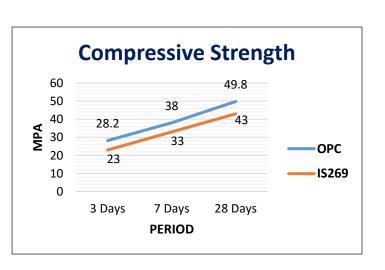
| Setting Time | Standard | OPC |
|---------------------|---------------------------|-------------|
| Initial | Not less than 30 minutes | 113 Minutes |
| Final | Not more than 600 minutes | 167 Minutes |

Its Preferential Usages:

- ➤ Used in general purposes construction
- Mass concreting works
- ➤ Plastering & finishing works
- > Structures requiring early strength

Advantages:

- Produces highly durable and sound concrete
- ➤ Almost negligible chloride content results in restraining corrosion of concrete structure in hostile environments
- ➤ Significant saving in cement consumption due to high strength



PENDEN PREMIUM PLUS

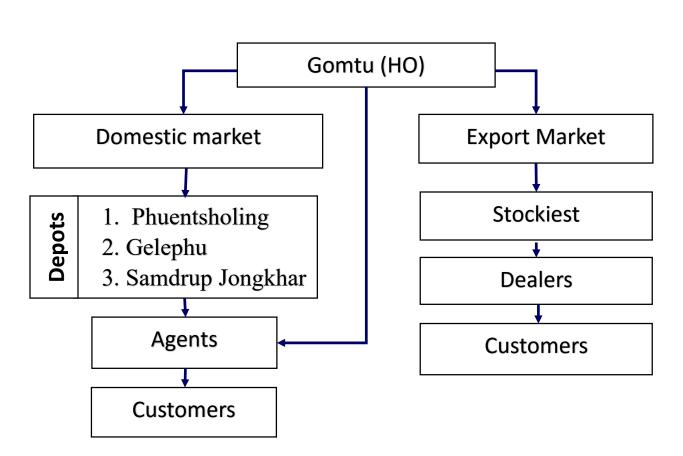
PPC PLUS is the latest Penden Premium brand cement launched in the market. It is an environmental friendly product. Its usage is as same as PPC but it has superfluous advantages with packaging.

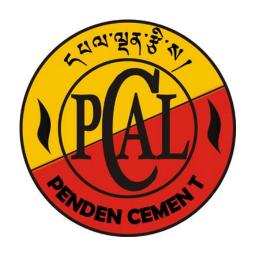
Features and advantages:

- ➤ Laminated bag packet
- Zero pilferage
- ➤ Longer shelf life
- ➤ Moisture resistance
- > Environment friendly



CEMENT DISTRIBUTION CHANNEL





PENDEN CEMENT AUTHORITY LIMITED Gomtu: Bhutan

Head Office

Gomtu Bhutan: Tel. No. +975 5 371013/14 **Sales & Marketing**: +975 5 371214/371118

Sales Depot

Phuntsholing: +975 5 252885, Fax: 324665 Gelephu: +975 6 252604, Fax: 351791 Samdrup Jongkhar: +975 7 251790, Fax: 251791

Stockiest

R.P. Agarwal: +919733137197 Garg: +919434011620 Chandarika: +919832029590

Email: contact us@pendencement.bt

For details visit

www.pendencement.bt