A member of UEM

**CORPORATE OFFICE**


**Cement Industries of Malaysia Berhad**
197201000294 (11986-T)
Annexe 2, Persada PLUS, Persimpangan Bertingkat Subang
KM 15, Lebuhraya Baru Lembah Klang
47301 Petaling Jaya, Selangor, Malaysia

Tel :+603 2733 1188
Fax:+603 7665 0018


## Marketed by:


**Negeri Sembilan Cement Industries Sdn Bhd**
199401025733 (311414-H)
Annexe 2, Persada PLUS, Persimpangan Bertingkat Subang
KM 15, Lebuhraya Baru Lembah Klang
47301 Petaling Jaya, Selangor, Malaysia

Tel :+603 2733 1188
Fax:+603 7665 0018


Additional information is available at
**www.cima.com.my**

A member of UEM

# NS OPC
## ORDINARY PORTLAND CEMENT

**Cement Industries of Malaysia Berhad (CIMA)** is one of Malaysia's largest cement manufacturers and well known for producing and distributing high quality cement since 1975, ready - mixed concrete, aggregates & premix and related products.

# NS ORDINARY PORTLAND CEMENT

**Ordinary Portland Cement (OPC)** is the most common cement used in the construction industry throughout the world. However, to address the ever challenging construction industry, Cement Industries of Malaysia Berhad (CIMA) has formulated **NS OPC**. Made using carefully selected raw materials and strict manufacturing processes, CIMA strives to ensure that we serve you the best products for your construction needs.

**NS OPC complies with**
**MS EN 197-1:2014 CEM I 52.5 N**
**SS EN 197-1:2014 CEM I 42.5 R**
**ASTM CI50/C150M – 2011 TYPE II – MH**

## Application

**NS OPC** is suitable for most types of construction including (but not limited to) building superstructures, infrastructures, bridges and piers, pavements, pre-cast concrete structures and also wall finishes.

## Properties

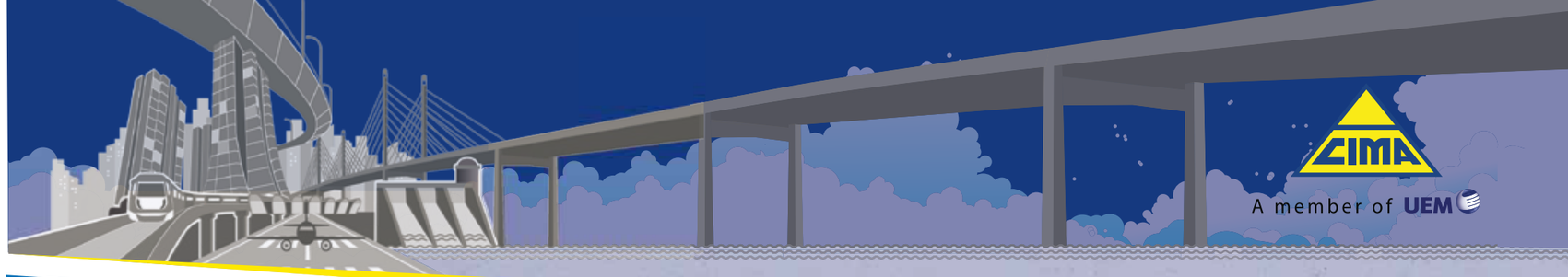
**NS OPC** is produced under 52.5N strength class to ensure optimum strength with any type of construction. The superior strength also ensures peace of mind throughout every stage of the building life cycle.

## Availability

**NS OPC** is produced by Negeri Sembilan Cement Industries (NSCI), Bahau Plant in Negeri Sembilan and currently available in bulk delivery.

MS SIRIM
MS EN 197-1 : 2014
CERTIFICATION NO : PN006801

MS SIRIM
ASTM C 150M -2011
CERTIFICATION NO : PN006802



## Specification

| PROPERTIES | | | UNIT | MS 197-1 2014 CEM I | ASTM C150M 2011 TYPE II | NS OPC TYPICAL |
|---|---|---|---|---|---|---|
| CHEMICAL PROPERTIES | | | | | | |
| Sulphur Trioxide ($SO_3$) | | | (%) | 4.0 max. | 3.0 max. | 2.73 |
| Chloride (CI) | | | (%) | | 0.1 max. | 0.011 |
| PHYSICAL PROPERTIES | | | | | | |
| Specific Surface by Blaine | | | ($cm^2/g$) | | | 3730 |
| Setting Time by Vicat | | Initial | (mins) | 45 min. | | 153 |
| | | Final | (mins) | | | 184 |
| Expansion | | | (mm) | | 0.8 max. | 0.2 |
| Heat of Hydration | | | (cal/g) | | 70.0 max. | 66.5 |
| Compressive Strength (CEM I) | Mortar Prism | 2 Days | (MPa) | 20.0 min. | | 27.4 |
| | | 28 Days | (MPa) | 52.5 min. | | 56.1 |
| | Mortar | 3 Days | (MPa) | | 7.0 min. | 28.7 |
| | | 7 Days | (MPa) | | 12.0 min. | 34.22 |
| | | 28 Days | (MPa) | | 22.0 min. | 44.8 |

## Superior Quality

### Moderate Heat of Hydration

**NS OPC** complies with ASTM C150/150M TYPE II - MH cement classification which means that it has a moderate heat of hydration properties. This reduces the risk of thermal cracks in concrete.

### Moderate sulfate resistance

**NS OPC** has moderate sulfate resistance properties that allows the cement to be used under a harsher condition without compromising it's strength and durability.

### Lower alkali content

**NS OPC** has a lower alkali content which helps to reduce the potential for Alkali – Silica reaction in concrete.

### Compatibility with admixture

**NS OPC** is compatible with all admixtures that complies to ASTM C494M - 2017 (Standard Specification for Chemical Admixtures for Concrete)

## Quality Assurance

- Our products undergo stringent quality control processes at every stage of the production to ensure that they are consistent in quality and satisfies our customers' needs.
- Our production facilities are certified with ISO9001: 2015 , ISO 14001: 2015 and ISO 18001: 2007
- Our testing facilities are accredited with MS ISO/IEC 17025