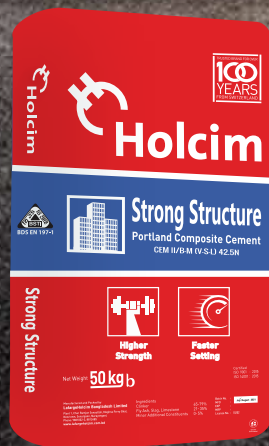


# STRONGER STRONGER STRONGER

# TOGETHER



**WORLD'S NUMBER 1  
BUILDING MATERIAL EXPERT**



# HISTORY OF

LAFARGEHOLCIM BANGLADESH LIMITED  
(LHBL)



**LafargeHolcim is the global leader in building materials and solutions; active in four business segments: cement, aggregates, ready-mix concrete and solution & products.**

- Operation in 80 countries
- About 72,000 employees
- 264 cement and grinding plants
- 649 aggregates plants
- 1402 Ready-mix concrete plants
- Total sales in 2019: 207.9 million tons

- LHBL started its journey in 2017 after the global merger of Lafarge and Holcim in 2015.
- LHBL produces world class cement to meet the growing demand generated by massive infrastructure development programs and improved socio economic conditions.
- LHBL has a unique cross border operation. It sources limestone from its own quarry in neighboring Meghalaya in India through a 17 kilometer overland long conveyer belt.
- LHBL has provided direct and indirect employment opportunities for over 3000 people.





## OUR PLANTS AND LOGISTICS

### ABOUT Holcim

#### 1912

Holcim was born with the opening of a first cement plant in Holderbank (Switzerland).

#### 1922-1931

The company began investing in cement business in other European countries and in Egypt, Lebanon and South Africa.

#### 2001

The company's name was changed from "Holderbank Financière Glaris" to "Holcim" by a vote at the annual general meeting.

#### 2014-2015

Holcim and Lafarge announced their merger project. Which gave birth to Lafarge-Holcim, the new leader of the building materials industry.

### ABOUT LAFARGE

#### 1833

The Lafarge Company was born in Le Teil (Ardèche, France). Joseph Auguste Pavin de Lafarge began regular extraction operations in the limestone quarries.

#### 1980s-90s

Lafarge led a significant International expansion with new operations in Sub-Saharan and East Africa as well as in China, India, and South Korea.

#### 2014-2015

Holcim and Lafarge announced their merger project. Which gave birth to Lafarge-Holcim, the new leader of the building materials industry.



**Meghna 1**  
Narayanganj, Dhaka

- Produces PCC and PLC in Bag and Bulk also produces Blast Furnace Slag Cement
- Acquired in 2000
- 4 Cement Mills
- Yearly capacity: 1.6 million ton



**Meghna 2**  
Narayanganj, Dhaka

- Produces PCC and OPC in Bag and Bulk
- Acquired in 2001
- 2 Cement Mills
- Yearly capacity: 0.4 million ton



**Surma**  
Chhatak, Sylhet

- Produces PLC in Bag
- Commissioned in 2000
- 1 Vertical Raw Mill
- 1 Clinker kin
- 2 Cement Mills
- Yearly capacity: 1.6 million ton



**Mongla**  
Mongla, Khulna

- Produces PCC and OPC in bag and bulk
- Acquired in 2001
- 2 Cement Mills
- Yearly capacity: 0.4 million ton



**Barge loading from plant**

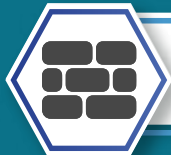
## WHY **Supercrete** IS THE BEST BRAND IN SUB PREMIUM CATEGORY?



Supercrete provides consistent quality through its own clinker production facility and modern quality control system.



Best solution for fair face concrete and gives very beautiful aesthetic view of buildings



Supercrete gives smooth finishing of plastering works



10% High Early strength compared to other PCC Cements in 7 Days



High early strength speeds up the construction work which saves 3% construction cost

## Supercrete



### Specification & Composition:

- BDS EN 197-1:2010, CEM II/B-L
- Strength Class- 42.5N (Only Portland limestone cement (PLC) brand in Bangladesh)

Composition	Standard Value
Clinker	65 - 79%
Limestone	21 - 35%
Gypsum	0 - 5%

### Application:

Supercrete is suitable for any types of construction work, specially for :

- High rise building, fairface concrete,
- foundation & regular RCC concrete.
- All Purpose Cement.

### Composition and Physical Properties of Supercrete Cement:

Physical Properties	Standard value (All types of IP/IS/IL/IT-ASTM C595)	Supercrete result as per BUET test (Approx)
Initial Setting Time	≥45 Min	180+/-10 Min
Final Setting Time	≤420 Min	360+/-30 Min
3 Days Strength	13 Mpa (1890 PSI)	>20.3 Mpa (2950 PSI)
7 Days Strength	20 Mpa (2900 PSI)	>27.3 Mpa (3960 PSI)
28 Days Strength	25 Mpa (3620 PSI)	>37.6 Mpa (5450 PSI)

# WHY Holcim STRONG STRUCTURE IS THE MOST PREMIUM CEMENT OF BANGLADESH?



HSS gives higher concrete strength (300 to 450 PSI extra) than any other available PCC in Bangladesh.



Gives long term strength, more than 6500 PSI at 90 days.



Reduces 10% to 15% Cement Consumption resulting in cost saving.



Offers long term durability by preventing steel corrosion due to lesser chloride diffusion.



Suitable for concrete strength from 4000 PSI to 4800 PSI. And the strength can be enhanced by using chemical admixtures.

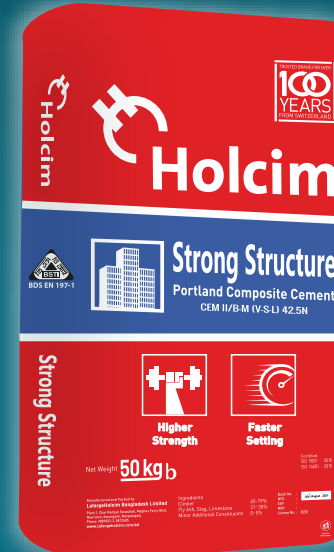


Sets comparatively faster than any other available composite cements due to its different chemical composition.



Mix becomes cohesive and has a reducing bleeding capacity.

# Holcim STRONG STRUCTURE



### Specification and Composition:

- BDS EN 197-1:2010, CEM II/B-M (S-V-L)
- Strength Class- 42.5N, Portland Composite Cement

Composition	Standard Value
Clinker	65 - 79%
Fly Ash, Slag & LS	21 - 35%
Minor Additional Constituents	0 - 5%

### Application:

Holcim Strong Structure is suitable for any types of construction work including the following special RCC work:

- Deep Foundation and any types of RCC work
- High-Rise Building
- Bridges and Flyovers


### Composition and Physical Properties of Holcim Strong Structure:


Physical Properties	Standard value (All types of IP/IS/IL/IT: ASTM C595)	HSS result as per BUET test (Approx)
Initial Setting Time	≥45 Min	180+/-10 Min
Final Setting Time	≤420 Min	360+/-30 Min
3 Days Strength	13 Mpa (1890 PSI)	>22 Mpa (3190 PSI)
7 Days Strength	20 Mpa (2900 PSI)	>28.2 Mpa (4090 PSI)
28 Days Strength	25 Mpa (3620 PSI)	>41.1 Mpa (5970 PSI)

# WHY **Holcim WATER PROTECT** IS THE BEST WATER REPELLER CEMENT?


 Has integral water repellent properties with water repellency at particle level.

 Resists the permeation of water due to reduced capillary action, which makes it damp resistant and durable.

 Reduces salt efflorescence as it restricts water transportation through concrete pores.

 Restricts rate of flow of water through its pores hence reduces water leakage.

 Absorbs much less water by capillary action and acts as a corrosion resistant solution.

 Concrete made of Holcim water protect improves cohesiveness of the mix.

 Offers long term Strength beyond 28 days which is similar to more than **5600 PSI at 90 Days.**

 Reduces **10 to 15% Cement Consumption** for its higher strength gain properties which also saves cost.

# **Holcim WATER PROTECT**



### Specification & Composition:

- BDS EN 197-1:2010, CEM II/B-M (V-S-L)
- Strength Class- 42.5N, Portland Composite Cement

Composition	Standard Value
Clinker	65 - 79%
Fly Ash, Slag & Limestone	21 - 35%
Minor Additional Constituents	0 - 5%

### Application:

Holcim (Water Protect) is suitable for any types of Structural and non structural construction work.


- Foundation Concrete
- Roof Slab, Beams & Columns
- Brick Masonry
- Retaining Wall & Basement
- Bathrooms and Balconies
- Water Tanks & Water Retaining Structures

### Composition & Physical Properties of Holcim (Water Protect) Cement:

Physical Properties	Standard value (All types of IP/IS/IL/IT: ASTM C595)	HWP result as per BUET test (Approx)
Initial Setting Time	≥45 Min	180+/-10 Min
Final Setting Time	≤420 Min	360+/-30 Min
3 Days Strength	13 Mpa (1890 PSI)	>16.1 Mpa (2330 PSI)
7 Days Strength	20 Mpa (2900 PSI)	>24.2 Mpa (3500 PSI)
28 Days Strength	25 Mpa (3620 PSI)	>35.3 Mps (5120 PSI)

# WHY Holcim SHOKTI IS THE STRONGEST CEMENT?


 First Rapid Hardening Cement in Bangladesh


 50% Higher Early strength compared to other PCC

 At least 15% shorter de shuttering time

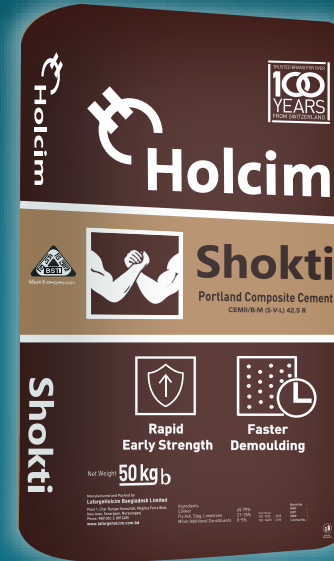
 Speedy Construction due to early de-shuttering, rapid strength gaining

 Faster project completion , reuse of formwork, less man-hour tend to at least BDT 70 tk/ cement bag cost saving

 Clear distinction of bag quality with special tamper proof packaging-BOPP bag

 Longer storage time

# Holcim SHOKTI



### Specification and Composition:

- BDS EN 197-1:2010, CEM-II/B-M (S-V-L)
- Strength Class-42.5 R, Portland Composite Cement

Composition	Standard Value
Clinker	65 - 79%
Slag, Limestone, Fly Ash	21 - 35%
Minor Additional Constituents	0 - 5%

### Application:

Holcim Shokti is suitable for construction of residential and commercial buildings, all kinds of RCC structure, renovation and modernization works. Specially for

- Beam/Column/Slab
- Foundation
- Precast & Prestressed concrete (Brick, Block, Electric Poles)
- Bridge Girder, Rigid pavement
- Industrial slab, Retro-fittings
- High and Low rise buildings
- Road construction

Physical Properties	Standard Value (ASTM: C595-9)	Holcim Shokti Result as per BUET
Initial Setting Time	≥45 Min	169 Min
Final Setting Time	≤420 Min	376 Min
3 Days Strength	13 Mpa (1890 PSI)	>25.8 Mpa (3750 PSI)
7 Days Strength	20 Mpa (2900 PSI)	>32.9 Mpa (4780 PSI)
28 Days Strength	25 Mpa (3620 PSI)	>41.5 Mpa (6010 PSI)

# WHY Holcim RED IS THE BEST OPC IN BANGLADESH?



Holcim Red gives highest strength among all other OPC in Bangladesh. More than 6000 PSI in 28 days.



Develops strength very fast, surely above 3000 PSI within 3 days.



Uses best quality clinker and finest raw material from different parts of the world.



Sets and gains strength in short time that saves construction time and cost.



Produces highly dense and durable concrete due to very low percentage of Alkalis, chlorides, magnesia and free lime in its composition.



Gives significant saving in cement consumption up to 15% while making concretes of different grades.



### Specification and Composition:

- BDS EN 197-1:2010, CEM I (equivalent to ASTM C150 Type-1)
- Strength Class- 52.5 N, Ordinary Portland Cement

Composition	Standard Value
Clinker	95 - 100%
Gypsum	0 - 5%

### Application:

All kinds of constructions, specially suitable for:

- Pre-stressed concrete
- Hydraulic structure
- Tunnel
- Bridges and other large-scale construction works

### Composition and Physical Properties of Holcim Red :

Physical Properties	Standard value (Type I: ASTM C150)	Holcim Red result as per BUET test (Approx)
Initial Setting Time	≥45 Min	130-170 Min
Final Setting Time	≤420 Min	290-350 Min
3 Days Strength	12 Mpa (1740 PSI)	>26.9 Mpa (3900 PSI)
7 Days Strength	19 Mpa (2760 PSI)	>34.5 Mpa (5000 PSI)
28 Days Strength	28 Mpa (4060 PSI)	>44.1 Mpa (6400 PSI)



**LANDMARKS IN  
BANGLADESH  
BUILT WITH  
Holcim**

**LANDMARKS IN  
BANGLADESH  
BUILT WITH  
*Supercrete***



**Jamuna Bridge**



**Rampal Power Plant**



**Grand Sultan Tea  
Resort & Spa**



**The Palace Luxury Resort**



**Jatrabari Gulistan Flyover**



**The Glass House**

**And many more...**

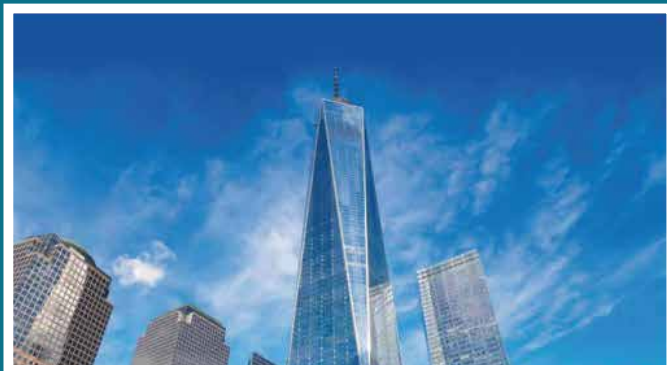
**And many more...**



**Beijing National Centre for the Performing Arts ,China**



**Jedda Airport, Saudi Arabia**



**One World Trade Center , USA**



**Terenez Bridge, France**

**And many more...**

# CONCRETE INNOVATION & APPLICATION CENTRE (CIAC):

Concrete Innovation & Application Centre, a well-equipped Concrete and Aggregate Testing Laboratory. It's a pioneering step of Holcim Cement Bangladesh Ltd which provides the tools to check and ensure the quality of construction. This laboratory has been accredited by Bangladesh Accreditation Board (BAB), offers a wide range of services to our valuable customers. The available services are -

- Concrete Mix Design for all types of required strength.
- Scope and research on high performance concrete.
- Aggregate Testing (Sieve Analysis, Fineness Modulus, ACV Test, etc)
- Testing of Concrete cube / cylinder up to 100 Mpa.



**Mobile Concrete Lab**



**CIAC Lab**

Holcim Mobile Concrete Laboratory: Holcim also provides services and solutions to its valued customers. In its continuation, Holcim Cement Bangladesh Ltd has introduced Mobile Concrete Laboratory. Mobile Concrete Laboratory is a formal laboratory designed to perform major concrete tests right at the construction sites. It saves the customers from the difficulties of carrying sample to different laboratories for even the simplest test. This mobile laboratory has been established to ensure:

- Major test of concrete and aggregates
- Prompt on-spot services like NDT, CCTS etc.
- Expert support to produce quality concrete according to mix design.

**Following testing facilities are available at CIAC lab with a reasonable service charge .**

Serial	Name of Test	ASTM/BS	Result		
			3-Days	7-Days	28-Days
1	Compressive strength test by hammer	C-805	3-Days	7-Days	28-Days
2	Temperature of water/concrete	C-1064			
3	Material finer than #200mm sieve	C-117			
4	Setting time of fresh Concrete	C-403			
5	Air Content	C-231			
6	Slump test	C-143	0 min	30 min	60 min
7	Unit wt. of Coarse Aggregate	C-29			
8	Unit wt. of Fine Aggregate	C-29			
9	Sieve Analysis of Coarse Aggregate	C-136			
10	Sieve Analysis of Fine Aggregate	C-136			
11	PH value of water/Concrete				
12	Concrete Mix Design (without Admixture)	ACI			
13	Concrete Mix Design (with Admixture)	ACI			
14	Comp. St. of Cylinder (100X200mm)	C-39	3-Days	7-Days	28-Days
15	Comp. St. of Cylinder (150X300mm)	C-36	3-Days	7-Days	28-Days
16	Compressive Strength of Cube 150 mm	C-39	3-Days	7-Days	28-Days
17	Absorption, Sp. Gravity & density of CA	C-127			
18	Absorption, Sp. Gravity & density of FA	C-128			
19	Moisture Content	C-566			
20	Flakiness Index	N933 - 3:1997			
21	Elongation Index	N933 - 4:2008			
22	Aggregate Crushing Value	BS 812- 110			
23	Clay Lump & Friable particles	ASTM C-142			

# Helpline

☎ **16319**

**For any kind of query and assistance**



 **SupercreteBangladesh**

 **Holcim Bangladesh**

**[www.lafargeHolcim.com.bd](http://www.lafargeHolcim.com.bd)**

For more information, please contact with our technical Support Department

**LafargeHolcim Bangladesh Limited**

A company of  LafargeHolcim and 

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