

GENERAL DESCRIPTION

PORTLAND SUPER is a special blended super-plasticizer with highest range of water reducing effect to develop the highest possible strength of mortar and concrete as well as the flow ability, pump ability, workability, normal setting time, water permeability resistance. These qualifications made it ideal for engineering works where ordinary high range water reducing admixtures can not be done.

COMPLY WITH : ASTM C 494 TYPE F AND ASTM C 1017 TYPE 1

FEATURES

- With the same mix-design, Flowability will be increased.
- Reduce in water with the same Flowability, strength will be increased.
- Reduce in water with the same Flowability and strength, cement content can be saved.
- In one unit of using, it can reduce water according to the ASTM C494 Type F(Water reducing high range)
- Over normal doses, the higher range of water reduction will occur until it meets the minimum limit of water requirement for water cement reaction. That is the highest possibility of compressive strength. However, over normal doses trend toward the retardation

WHERE TO USE

Usable for all type of Cement

HOW TO USE

Mix Portland Super with mixing water, then mix with cement and aggregates (in ratio 0.2 to 0.35) , and apply

DOSAGE

1 pack (100 gm) per 1 bag (50 kg) of Cement

TECHNICAL DATA

	Conventional Concrete	High Strength Concrete	Ultra high Strength
Strength, Mpa	<50	50-100	>100
W/c	>0.45	0.45-0.30	<0.30
Mineral Admixture	Fly Ash	Silica	Fume
Admixture	PL-Super	PL-Super	PL-Super
	+*PL-HR	+*PL-HR	
Dosages l	1+1	1+2	

*PL-HR is Portland Hi-Range a Naphthalene Sulfonate type high-range water reducing agent. Normal dosage is 0.4% of cement.

STORAGE CONDITION: Keep dry

SHELF LIFE: More than 1 year

PACKAGING: 1 Pack = 100 gm
1 box = 200 pack

	Type F Water Reducing High Range	Typical Testing Data 1 Dose
Water content Max . % of Control.....	88	84
Time of setting allowable deviation from control, h:mm: Initial: at least..... not more than.....	1:00 earlier not 1:30 later	0:30 later
Final at least..... not more than.....	1:00 earlier not 1:30 later	1:20 later
Compressive strength, min, % of control:		
1 day.....	140	...
3 days.....	125	145
7 days.....	115	140
28 days.....	110	138
6 months.....	100	
1 year.....	100	
Flexural strength, min. of control:		
3 days.....	110	
7 days.....	100	
28 days.....	100	
Length change, max Shrinkage (alternative requirements): Percent of control.....	135	
Increase over control	0.010	
Relative durability Factor, min	80	