

KING		PRODUCT SELECTION CHART																			
		CONCRETES											REPAIR MORTARS						GROUTS		
		FA-S6	FA-S10	MS-S6	MS-S10	MS-S6 SCC	MS-S10 SCC	LM-S6	LM-S10	HP-S6	HP-S10	RS-S10	RS-S10 SCC	RS-S2	SUPER-TOP	DURO-CRETE	DURO-CRETE CT	DURO-CRETE UW	IN-PAKT CONSTRUCTION	IN-PAKT PRECISION	IN-PAKT PRECISION CT
MIN. THICKNESS*		25 mm (1")	38 mm (1.5")	25 mm (1")	38 mm (1.5")	38 mm (1.5")	50 mm (2")	25 mm (1")	38 mm (1.5")	25 mm (1")	38 mm (1.5")	38 mm (1.5")	50 mm (2")	6 mm (0.25")	6 mm (0.25")	6 mm (0.25")	6 mm (0.25")	6 mm (0.25")	6 mm (0.25")	6 mm (0.25")	6 mm (0.25")
KEY FEATURE(S)		Workability, Air Entrainment & Fly Ash Enhancement		Air Entrainment & Silica Fume Enhancement		Air Entrainment, Self-Consolidation & Silica Fume Enhancement		Polymer-Modification		High Performance, High Early Strength, Air Entrainment & Silica Fume Enhancement		Rapid Compressive Strength Gain	Rapid Compressive Strength Gain & Self-Consolidation	Rapid Compressive Strength Gain	Polymer-Modification & Rapid-Setting	Rapid-Setting	Cold Temperature Application	Underwater Application	Non-Shrink	High Performance, Non-Shrink & Resistant to Water Wash-Out	Cold Temperature Application, Non-Shrink & High Performance
APPLICATIONS		Partial and full depth rehabilitation of concrete structures. Applications requiring cathodic protection.		Partial and full depth rehabilitation of concrete structures. Especially useful in rehabilitation of concrete exposed to high salt (chloride) environments.		Formed repairs of concrete beams, columns, soffits and/or shear walls. Especially useful in rehabilitation of concrete exposed to high salt (chloride) environments.		Partial and full depth rehabilitation of concrete structures requiring only 24 hours of curing and allowing for membrane application after 24-48 hours.		Partial depth rehabilitation of concrete structures requiring return-to-service after 24 hours.	Partial and full depth rehabilitation of concrete structures requiring return to service after 24 hours; prefabricated bridge element assembly.	Partial and full depth rehabilitation of concrete structures requiring return-to-service after 3 hours.	Formed repairs for concrete beams, columns, soffits or shear walls requiring return to service after 3 hours.	Partial depth rehabilitation of concrete structures; applications requiring quick return-to-service after 3 hours; horizontal repair applications.	Partial depth rehabilitation of concrete structures; horizontal and vertical/overhead repair applications.	Partial depth rehabilitation of concrete beams or columns in parking garages, balconies or other concrete structures.		Partial depth rehabilitation of pilings, seawalls, water mains, dams, bridges, swimming pools or other underwater surfaces.	Grouting machinery base plates and column sole plates; grouting anchor bolts, dowels and hand-rails; repair of pre-cast units; infill of pipes and sleeves in marine environments.	Grouting machinery base plates and column sole plates; grouting anchor bolts, dowels and hand-rails; repair of pre-cast units; infill of pipes and sleeves in marine environments.	Grouting machinery base plates and column sole plates; grouting anchor bolts, dowels and hand-rails; repair of pre-cast units; infill of pipes and sleeves in marine environments.
		New Construction		New Construction		Form-and-Pump Overhead Applications		Especially useful in rehabilitation of concrete exposed to high salt (chloride) environments							Tie Hole Plugging						
EXPOSURE		Freeze-Thaw & De-Icing Salts		Freeze-Thaw & De-Icing Salts		Freeze-Thaw & De-Icing Salts		Freeze-Thaw & De-Icing Salts		Freeze-Thaw & De-Icing Salts		Freeze-Thaw & De-Icing Salts		Freeze-Thaw & De-Icing Salts		Freeze-Thaw			Freeze-Thaw & De-Icing Salts		
CURING DETAILS		Wet 7 Days		Wet 7 Days		Wet 7 Days		Wet 24 Hours		Wet 7 Days		Protect from evaporation for 3 hours			Wet 24 Hours	Wet 7 Days	Wet 7 Days	Wet 7 Days	Wet 7 Days	Wet 7 Days	Wet 7 Days
SLUMP/SLUMP FLOW**		100 mm ± 50 mm (4" ± 2")		100 mm ± 50 mm (4" ± 2")		650 mm ± 50 mm (26" ± 2")		200 mm ± 50 mm (8" ± 2")		200 mm ± 50 mm (8" ± 2")		200 mm ± 50 mm (8" ± 2")	625 mm ± 50 mm (25" ± 2")	100%-150%	100% ± 25%	>100%	>100%	>100%	Plastic: 110% Fluid: >150%	Plastic: 110% Fluid: >150%	Plastic: 110% Fluid: >150%
PUMPABLE?		Yes		Yes		Yes		No		No		No		No	No	No	No	No	Dry Pack and Plastic: No, Fluid: Yes		
AIR CONTENT		4.0%-9.0%		4.0%-9.0%		4.0%-9.0%		<8.0%		4.0%-9.0%		<8.0%									
INITIAL SET***		6 hours	6 hours	6 hours	6 hours	8 hours	8 hours	6 hours	6 hours	5 hours	5 hours	30 minutes-1 hour	30 minutes-1 hour	30 minutes-1 hour	25 minutes	25 minutes	5 minutes	30 minutes	Plastic: 3 hours Fluid: 4 hours	Plastic: 3 hours Fluid: 6.5 hours	Plastic: 3.0 hours Fluid: 5.5 hours
FINAL SET***		8 hours	8 hours	8 hours	8 hours	10 hours	10 hours	8 hours	8 hours	6 hours	6 hours	45 minutes-1 hour 15 minutes	45 minutes-1 hour 15 minutes	45 minutes-1 hour 15 minutes	45 minutes	45 minutes	7 minutes	45 minutes	Plastic: 4.5 hours Fluid: 6.5 hours	Plastic: 3.5 hours, Fluid: 8.5 hours	Plastic: 3.5 hours Fluid: 7.0 hours
MEMBRANE APP. AFTER****		10 Days		8 Days		N/A		24 hours	24 hours	8 days	8 days	3 hours	3 hours	3 hours	48 hours	11 days	11 days	11 days			
COMPRESSIVE STRENGTH***	3 HOUR											25 MPa (3625 psi)	25 MPa (3625 psi)	25 MPa (3625 psi)							
	12 HOUR										20 MPa (2900 psi)				10 MPa (1500 psi)						
	1 DAY	15 MPa (2175 psi)	15 MPa (2175 psi)	20 MPa (2900 psi)	20 MPa (2900 psi)	10 MPa (1500 psi)	10 MPa (1500 psi)	20 MPa (2900 psi)	20 MPa (2900 psi)	40 MPa (5800 psi)	40 MPa (5800 psi)	35 MPa (5075 psi)	35 MPa (5075 psi)	35 MPa (5075 psi)	20 MPa (2900 psi)	15 MPa (2175 psi)	20 MPa (2900 psi)	15 MPa (2175 psi)	Dry Pack: 35 MPa (5075 psi) Plastic: 25 MPa (3625 psi) Fluid: 20 MPa (2900 psi)	Plastic: 25 MPa (3625 psi) Fluid: 20 MPa (2900 psi)	Plastic: 25 MPa (3625 psi) Fluid: 15 MPa (2175 psi)
	3 DAY	30 MPa (4350 psi)	30 MPa (4350 psi)	25 MPa (3625 psi)	25 MPa (3625 psi)	25 MPa (3625 psi)	25 MPa (3625 psi)	25 MPa (3625 psi)	25 MPa (3625 psi)	45 MPa (6500 psi)	45 MPa (6500 psi)	37 MPa (5360 psi)	37 MPa (5360 psi)	40 MPa (5800 psi)	25 MPa (3625 psi)	25 MPa (3625 psi)	25 MPa (3625 psi)	30 MPa (4350 psi)	Dry Pack: 45 MPa (6500 psi) Plastic: 30 MPa (4350 psi) Fluid: 25 MPa (3625 psi)	Dry Pack: 50 MPa (7250 psi) Plastic: 30 MPa (4350 psi) Fluid: 25 MPa (3625 psi)	Dry Pack: 40 MPa (5800 psi) Plastic: 30 MPa (4350 psi) Fluid: 20 MPa (2900 psi)
	7 DAY	35 MPa (5075 psi)	35 MPa (5075 psi)	35 MPa (5075 psi)	35 MPa (5075 psi)	30 MPa (4350 psi)	30 MPa (4350 psi)	30 MPa (4350 psi)	30 MPa (4350 psi)	50 MPa (7250 psi)	50 MPa (7250 psi)	40 MPa (5800 psi)	40 MPa (5800 psi)	45 MPa (6500 psi)	30 MPa (4350psi)	30 MPa (4350 psi)	25 MPa (3625 psi)	35 MPa (5075 psi)	Dry Pack: 50 MPa (7250 psi) Plastic: 35 MPa (5075 psi) Fluid: 30 MPa (4350 psi)	Dry Pack: 55 MPa (8000 psi) Plastic: 45 MPa (6500 psi) Fluid: 40 MPa (5800 psi)	Dry Pack: 45 MPa (6500 psi) Plastic: 45 MPa (6500 psi) Fluid: 35 MPa (5075 psi)
	28 DAY	45 MPa (6500 psi)	45 MPa (6500 psi)	45 MPa (6500 psi)	45 MPa (6500 psi)	40 MPa (5800 psi)	40 MPa (5800 psi)	40 MPa (5800 psi)	40 MPa (5800 psi)	60 MPa (8700 psi)	60 MPa (8700 psi)	45 MPa (6500 psi)	45 MPa (6500 psi)	50 MPa (7250 psi)	40 MPa (5800 psi)	35 MPa (5075 psi)	30 MPa (4350 psi)	40 MPa (5800 psi)	Dry Pack: 65 MPa (9425 psi) Plastic: 40 MPa (5800 psi) Fluid: 35 MPa (5075 psi)	Dry Pack: 70 MPa (10150 psi) Plastic: 55 MPa (8000 psi) Fluid: 50 MPa (7250 psi)	Dry Pack: 55 MPa (8000 psi) Plastic: 55 MPa (8000 psi) Fluid: 40 MPa (5800 psi)
WORKING TIME		60 minutes	60 minutes	60 minutes	60 minutes	60 minutes	60 minutes	20 minutes	20 minutes	30 minutes	30 minutes	20 minutes	20 minutes	15 minutes	20 minutes	10 minutes	5 minutes	5 minutes	Dry Pack: 30 minutes Plastic: 60 minutes Fluid: 60 minutes	Dry Pack: 30 minutes Plastic: 60 minutes Fluid: 60 minutes	Dry Pack: 15 minutes Plastic: 30 minutes Fluid: 60 minutes

*Maximum Thickness: KING Construction Products containing 6 mm (1/4") aggregate should be used at a maximum thickness of 150 mm (6"). **Slump/Slump Flow: Is affected by temperature, mixer and job-site conditions. *** The following data is representative of typical values achievable under laboratory conditions. Results in the field may vary. **** For more detailed information regarding membrane application, refer to the KING Technical Reports called "Membrane Application to KING Construction Products" and "Rapid Membrane Application to KING Construction Products" which are accessible on our website.