

# Table 1

## Classification of intrinsic cracks

Type of cracking	Letter (see figure 2)	Subdivision	Most common location	Primary cause (excluding restraint)	Secondary causes/factors	Remedy (assuming basic redesign is impossible) in all cases reduce restraint	Further details see section ...	Time of appearance
Plastic settlement	A	Over reinforcement	Deep sections	Excess bleeding	Rapid early drying conditions	Reduce bleeding (air entrainment) or revibrate	5.2	Ten minutes to three hours
	B	Arching	Top of columns					
	C	Change of depth	Trough and waffle slabs					
Plastic shrinkage	D	Diagonal	Roads and slabs	Rapid early drying	Low rate of bleeding	Improve early curing	5.3	Thirty minutes to six hours
	E	Random	Reinforced concrete slabs					
	F	Over reinforcement	Reinforced concrete slabs	Ditto plus steel near surface				
Early thermal contraction	G	External restraint	Thick walls	Excess heat generation	Rapid cooling	Reduce heat and/or insulate	6	One day to two or three weeks
	H	Internal restraint	Thick slabs	Excess temperature gradients				
Long-term drying shrinkage	I		Thin slabs (and walls)	Inefficient joints	Excess shrinkage inefficient curing	Reduce water content improve curing	7	Several weeks or months
Crazing	J	Against formwork	"Fair-faced" concrete	Impermeable formwork	Rich mixes	Improve curing and finishing	8	One to seven days sometimes much later
	K	Floated concrete	Slabs	Over-troweling	Poor curing			
Corrosion of reinforcement	L	Natural	Columns and beams	Lack of cover	Poor quality concrete	Eliminate causes listed	9.1	More than two years
	M	Calcium chloride	Precast concrete	Excess calcium chloride				
Alkaline aggregate reaction	N		(Damp locations)	Reactive aggregate plus high-alkali cement		Eliminate causes listed	9.2	More than five years

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