

No-Fines Concrete shall only be used with open celled (hollow core) blocks.

Guidelines Specifications - (ACI 522. 1-13)

Target Values	Design In-Place Unit Weight	110-130 lbs/ft
	Water-Cement Ratio (W/C)	0.3-0.5
	Aggregate-Cement Ratio (A/C)	4.5:1 - 6:1
	Percent Air Voids	20-30% (ASTM C1688)
Cement	Percent Type - Portland	50% (Min)
	Percent Fly Ash	50% (Max)
Aggregate	Nominal Aggregate Size	1/2"-1" (No. 57 or No 6 stone per ASTM C33)
Admixture	As needed	

*For sulphate resistance, use Type II V Portland Cement

Structural Backfill Mix Design Example

Components	Batch Weight/Cubic Yard	Volume (CY)	Specific Gravity
Type 1 Portland Cement	210 lbs.	0.03957	3.15
Fly Ash	210 lbs.	0.04986	2.5
#6, #8, #57 Aggregate	2525 lbs.	0.57202	2.62
Water	166 lbs.	0.09853	1
Pozzolith 100x, Retarder	0.5 lbs.	Percent Fly Ash	50% (Max)
Air Voids		0.24	1/2"-1" (No. 57 or No 6 stone per ASTM C33)
Total	3111.5 lbs.	1	Unit Weight = 115lbs./ft

W/C = 0.4 A/C = 6.0 Percent Air Voids: 24%

NO - FINES CONCRETE TECHNICAL DATA



Structural Backfill Visual Aid

<p>Too Much Water</p>	 A photograph showing a pile of concrete aggregate in a bucket. The aggregate is dark and appears very wet and clumpy, with a lot of water visible on the surface.
<p>Too Little Water</p>	 A photograph showing a pile of concrete aggregate in a bucket. The aggregate is light-colored and appears very dry and clumpy, with a lot of dust visible on the surface.
<p>Proper Amount of Water</p>	 A photograph showing a pile of concrete aggregate in a bucket. The aggregate is dark and appears to be the right consistency, with some water visible but not too much.