Sample Mix Designs*

Material to Produce One Cubic Yard

Standard Mixes

Specified Compressive Strength	3000 PSI	4000 PSI	5000 PSI
Cement (lbs)	564	658	752
Fly Ash (Class F) (lbs)	0	0	0
STALITE 3/4" LWA (lbs-SSD)	875	875	875
Sand (lbs-SSD)	1446	1357	1268
Water (lbs)	296	300	304
The mix water content assumes the use of a normal water-reducing admixture to produce a 3" to 5" slump range.			
Design Air Content	5%	5%	5%
w/cm	0.52	0.46	0.40
Calculated Equilibrium Density (lbs/cf)	111.9	112.8	113.7
Calculated Fresh Density (lbs/cf)	117.8	118.2	118.5

High Strength Mixes

Specified Compressive Strength	6000 PSI	8000 PSI	10000 PSI
Cement (lbs)	705	799	893
Fly Ash (Class F) (lbs)	0	0	0
Silica Fume (lbs)	49	56	63
STALITE 1/2" LWA (lbs-SSD)	1000	1000	1000
STALITE weights changed to achieve specific concrete densities.			
Sand (lbs-SSD)	1247	1187	1128
Water (lbs)	280	270	260
The mix water content assumes the use of a high-range water-reducing admixture to produce the desired slump.			
Design Air Content	2%	2%	2%
w/cm	0.37	0.32	0.27
Calculated Equilibrium Density (lbs/cf)	117.4	119.7	122.0
Calculated Fresh Density (lbs/cf)	121.5	122.7	123.8

Bridge Deck Mixes

Specified Compressive Strength	4500 PSI	4500 PSI
Cement (lbs)	715	572
Fly Ash (Class F) (lbs)	0	172
Silica Fume (LBS)	0	0
STALITE 1/2" LWA (lbs-SSD)	900	900
Sand (lbs-SSD)	1235	1153
Water (lbs)	295	295
The mix water content assumes the use of a normal water-reducing admixture to produce an 8" to 10" slump range.		
Design Air Content	6%	6%
w/cm	0.41	0.40
Calculated Equilibrium Density (lbs/cf)	111.7	110.0
Calculated Fresh Density (lbs/cf)	116.5	114.5

***These are sample mix designs and should be used as guidelines only.**

Contact your *STALITE* representative for specific job mixes and information.
****ASTM C567-Section 9.4 and 9.5 .**

Sample Metric Mix Designs*

Material to Produce One Cubic Meter

Standard Mixes

Specified Compressive Strength	20 MPa	30 MPa	40 MPa
Cement (kg)	335	390	418
Fly Ash (Class F) (kg)	0	0	45
STALITE 19mm LWA (kg-SSD)	519	519	519
Sand (kgs-SSD)	864	810	768
Water (kg)	176	179	166
The mix water content assumes the use of a normal water-reducing admixture to produce a 10cm to 15cm slump range.			
Design Air Content	5%	5%	5%
w/cm	0.53	0.46	0.36
Calculated Equilibrium Density (kg/m^3)	1799	1812	1857
Calculated Fresh Density (kg/m^3)	1894	1898	1916

High Strength Mixes

Specified Compressive Strength	50 MPa	60 MPa	70 MPa
Cement (kg)	450	480	540
Fly Ash (Class F) (kg)	0	0	0
Silica Fume (kg)	31	34	38
STALITE 12.5mm LWA (kg-SSD)	594	594	594
STALITE weights changed to achieve specific concrete densities.			
Sand (kg-SSD)	640	620	655
Water (kg)	163	160	156
The mix water content assumes the use of a high-range water-reducing admixture to produce the desired slump.			
Design Air Content	5%	5%	2%
w/cm	0.34	0.31	0.27
Calculated Equilibrium Density (kg/m^3)	1822	1842	1954
Calculated Fresh Density (kg/m^3)	1878	1888	1983

Bridge Deck Mixes

Specified Compressive Strength	55 MPa	55 MPa
Cement (kg)	474	410
Fly Ash (Class F) (kg)	0	85
Silica Fume (kg)	33	33
STALITE 12.5mm LWA (kg-SSD)	563	564
STALITE weights changed to achieve specific concrete densities.		
Sand (kg-SSD)	653	606
Water (kg)	160	160
The mix water content assumes the use of a normal water-reducing admixture to produce a 8cm to 10cm slump range.		
Design Air Content	6%	6%
w/cm	0.32	0.30
Calculated Equilibrium Density (kg/m^3)	1837	1817
Calculated Fresh Density (kg/m^3)	1883	1858

***These are sample mix designs and should be used as guidelines only.**

Contact your *STALITE* representative for specific job mixes and information.

**ASTM C567-Section 9.4 and 9.5