

NUMERICAL EXAMPLES OF KALMATRON® KF- αβγ APPLICATIONS

■ APPLICATION BY THE THIN LAYERS AT 5 mm

Prepare mix of 3 to 1 parts by volumes to apply by trowels or skid vibrator as follows:

KF- αβγ : Water = 3 : 1 = 0.294 m³ : 0.098 m³ ≅ 3400 Kg : 106 Kg (97 L); W/C = 0.303

■ APPLICATION BY THE LAYERS AT 25 MM

Prepare mix of 3 to 1.5 parts by volumes to apply by shotcrete technique as follows:

KF- αβγ : Water = 3 : 1.5 = 0.294 m³ : 0.147 m³ ≅ 3400 Kg : 159 Kg (146 L); W/C = 0.45

■ CONSUMPTIONS OF KF- αβγ FOR MAJOR APPLICATIONS

THICKNESS OF LAYER, MM	KF- αβγ CONSUMPTIONS, Kg per 1 m ²			
	PRECAST	SHIELDCRETE	PLASTCRETE	KF-αβγ
5				17
10				34
15			1.5	51
20		2	2	68
50	5	5	5	
100	10	10	10	

■ EXAMPLES OF MIX DESIGNS WITH KF- αβγ FOR SHOTCRETE APPLICATIONS

● **SHIELDCRETE KF-αβγ** is a shotcrete mix designed for applications on/into earth formed constructions as a self-carrying, pre-reinforced, radiation-shielded, and waterproofed structure. SHIELDCRETE KF-αβγ eliminates the needs of wire mesh reinforcement and waterproofing arrangements.

● **PLASTCRETE KF-αβγ** is a shotcrete mix designed for applications on/into concrete/masonry structures as a protective coating that provides radiation attenuation with gas and liquid impermeability, with the highest adhesion to applied structure.

SHIELDCRETE KF-αβγ	Kg	m ³
Portland Cement type I; II	400	0.126
Coarse Sand #16	1,220	0.466
Pee gravel ¼"	500	0.198
KALMATRON® KF-αβγ, 4.24%	35÷100	0.0294
Water, 140 Liter or 37 Gal	141	0.141
Total	2,361	0.960

PLASTCRETE KF-αβγ	Kg	m ³
Portland Cement type I; II	500	0.158
Coarse Sand #16	1,600	0.620
KALMATRON® KF-αβγ, 4.24%	35÷100	0.0294
Water, 85 Liter or 23 Gal	175	0.175
Total	2,390	0.982