

PROPERTIES OF MATERIALS

MATERIALS	SPECIFIC WEIGHT			ANGLE OF REPOSE		FRICTION ANGLE
	A	B	C	(Degrees)		
	For Conveyor Size Design	For Conveyor H. P. and size of silos & stockpile	For Material Loads on Building Structures	For Size of Silos & Stockpiles	For Civil Design	(Discharge Angle)
	Kg/m3	Kg/m3	Kg/m3			
Cement (Portland)	960	1440	1600	10	20	20
Cement (40% pozzolona)	940	1360	1600	-	-	-
Cement (40% Slag)	940	1330	1600	-	-	-
Clinker	1200	1360	1520	33	30	30
Clay: Loose	1040	1200	1600	40	-	-
Clay: Fine, Dry	1040	1600	1600	40	30	-
Clay: Wet	1280	1600	1920	45	15	-
Coal: Anthracite	800	960	1040	40	30	-
Coal: Butiminous	720	880	960	40	30	30
Coal: Pulverized	480	640	800	15	40	40
Gypsum, Raw,-1	1280	1440	1600	40	35	-
Iron Ore	2000	2400	3200	40	35	-
Kiln dust	640	960	1280	10	20	-
Limestone, Crushed	1360	1520	1680	40	35	35
Pozzolana, Coarse, Wet	1200	1360	1520	-	-	-
Pozzolana, Ground, Dry	950	1200	1360	-	-	-
Raw Meal	720	1280	1440	15	20	20
Raw Meal: Blending Silo	720	800	1440	15	20	20
Raw Meal: Cont. Blending	720	1120	1440	15	20	20
Sand: Dry	1360	1600	1680	40	35	35
Shale: Crushed	1360	1520	1680	40	35	35
Slag: B.F, Gran., Wet	1120	1220	1440	-	-	-
Slag: B.F, Gran., Wet	950	1050	1280	-	-	-
Flyash: Wet	1200	1360	1520	47	-	-
Flyash: Dry	700	880	960	42	-	-