

Appendix A-2: Construction Aggregate Samples



QM5: Quartzite/Metasiltstone 5"

R_s (cm)	4.69
M_s (kg)	5.990
ρ_s	2.42
ρ_{bulk} (kg/m ³)	1.07
I_v (liters)	3.088
V/V_s	0.44
n/kg	3
k (W/m/K)	35-29
c (J/kg/K)	410
α_{bulk} (m ² /s)	28



QM1: Quartzite/Metasiltstone 1"

R_s (cm)	1.67
M_s (kg)	5.590
ρ_s	2.02
ρ_{bulk} (kg/m ³)	1.01
I_v (liters)	2.786
V/V_s	0.50
n/kg	80
k (W/m/K)	16-12
c (J/kg/K)	1100
α_{bulk} (m ² /s)	6.1



QM.6: Quartzite/Metasiltstone 5/8"

R_s (cm)	1.27
M_s (kg)	5.540
ρ_s	1.87
ρ_{bulk} (kg/m ³)	1.00
I_v (liters)	2.598
V/V_s	0.53
n/kg	195
k (W/m/K)	8-9
c (J/kg/K)	1200
α_{bulk} (m ² /s)	3.9



QM.3: Quartzite/Metapsilstone 3/8"

R_s (cm)	0.72
M_s (kg)	5.640
ρ_s	1.77
ρ_{bulk} (kg/m ³)	1.02
I_v (liters)	2.367
V/V_s	0.57
n/kg	1123
k (W/m/K)	2-6
c (J/kg/K)	930
α_{bulk} (m ² /s)	2.2



FQ.5: Felsic Quartzite 0.5"

R_s (cm)	1.26
M_s (kg)	5.690
ρ_s	1.93
ρ_{bulk} (kg/m ³)	1.02
I_v (liters)	2.608
V/V_s	0.53
n/kg	196
k (W/m/K)	8
c (J/kg/K)	1000
α_{bulk} (m ² /s)	4.2



M1: Crushed Marble 1"

R_s (cm)	1.98
M_s (kg)	5.940
ρ_s	2.06
ρ_{bulk} (kg/m ³)	1.07
I_v (liters)	2.675
V/V_s	0.52
n/kg	47
k (W/m/K)	16-19
c (J/kg/K)	940
α_{bulk} (m ² /s)	8.0



M0.8: Crushed Marble 0.75"

R_s (cm)	1.24
M_s (kg)	6.250
ρ_s	2.12
ρ_{bulk} (kg/m ³)	1.13
I_v (liters)	2.608
V/V_s	0.53
n/kg	184
k (W/m/K)	36-29
c (J/kg/K)	940
α_{bulk} (m ² /s)	16



B1: Crushed Brick 1"

R_s (cm)	1.81
M_s (kg)	4.440
ρ_s	2.22
ρ_{bulk} (kg/m ³)	0.80
I_v (liters)	3.556
V/V_s	0.36
n/kg	57
k (W/m/K)	19-17
c (J/kg/K)	1200
α_{bulk} (m ² /s)	6.7



B0.8: Crushed Brick 3/4"

R_s (cm)	1.12
M_s (kg)	4.445
ρ_s	2.14
ρ_{bulk} (kg/m ³)	0.80
I_v (liters)	3.480
V/V_s	0.37
n/kg	258
k (W/m/K)	6
c (J/kg/K)	1500
α_{bulk} (m ² /s)	2.5



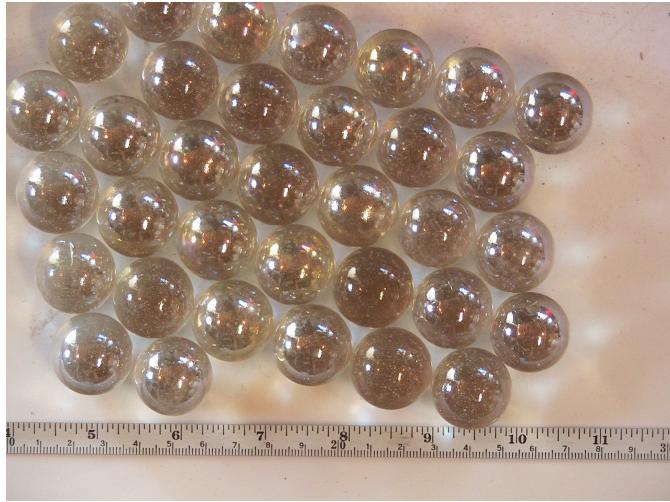
C1: Granite Stream Cobble 1.5"

R_s (cm)	2.62
M_s (kg)	6.245
ρ_s	2.08
ρ_{bulk} (kg/m ³)	1.12
I_v (liters)	2.556
V/V_s	0.54
n/kg	20
k (W/m/K)	28-26
c (J/kg/K)	870
α_{bulk} (m ² /s)	13



S2: Siltstone 3"

R_s (cm)	3.77
M_s (kg)	4.690
ρ_s	1.98
ρ_{bulk} (kg/m ³)	0.844
I_v (liters)	3.191
V/V_s	0.43
n/kg	7
k (W/m/K)	47-57
c (J/kg/K)	920
α_{bulk} (m ² /s)	26



GB1: Glass Marbles 1"	
R_s (cm)	1.77
M_s (kg)	5.845
ρ_s	2.58
ρ_{bulk} (kg/m ³)	1.05
I_v (liters)	3.290
V/V_s	0.41
n/kg	52
k (W/m/K)	15
c (J/kg/K)	110
α_{bulk} (m ² /s)	5.1



SB1: 1018 Alloy Mild Steel Balls 1"	
R_s (cm)	1.75
M_s (kg)	20.660
ρ_s	8.81
ρ_{bulk} (kg/m ³)	3.72
I_v (liters)	3.210
V/V_s	0.42
n/kg	15
k (W/m/K)	35-26
c (J/kg/K)	53.4
α_{bulk} (m ² /s)	6.2