

# 07 21 Thermal Insulation

## 07 21 23 – Loose-Fill Insulation

07 21 23.20 Masonry Loose-Fill Insulation		Crew	Daily Output	Labor-Hours	Unit	Material	2022 Bare Costs			Total	Total Incl O&P
							Labor	Equipment			
0010	MASONRY LOOSE-FILL INSULATION, vermiculite or perlite										
0100	In cores of concrete block, 4" thick wall, .115 C.F./S.F.	G	D-1	4800	.003	S.F.	.36	.17		.53	.65
0200	6" thick wall, .175 C.F./S.F.	G	D-1	3000	.005	S.F.	.55	.27		.82	1.01
0300	8" thick wall, .258 C.F./S.F.	G		2400	.007		.81	.33		1.14	1.39
0400	10" thick wall, .340 C.F./S.F.	G		1850	.009		1.07	.43		1.50	1.83
0500	12" thick wall, .422 C.F./S.F.	G		1200	.013		1.33	.67		2	2.46
0600	Poured cavity wall, vermiculite or perlite, water repellent	G		250	.064	C.F.	3.15	3.21		6.36	8.30
0700	Foamed in place, urethane in 2-5/8" cavity	G	G-2A	1035	.023	S.F.	1.84	1.02	.64	3.50	4.34
0800	For each 1" added thickness, add	G	"	2372	.010	"	.70	.45	.28	1.43	1.78

## 07 21 26 – Blown Insulation

### 07 21 26.10 Blown Insulation

0010	BLOWN INSULATION Ceilings, with open access										
0020	Cellulose, 3-1/2" thick, R13	G	G-4	5000	.005	S.F.	.29	.22	.11	.62	.77
0030	5-3/16" thick, R19	G		3800	.006		.42	.29	.14	.85	1.07
0050	6-1/2" thick, R22	G		3000	.008		.54	.37	.18	1.09	1.35
0100	8-11/16" thick, R30	G		2600	.009		.73	.43	.21	1.37	1.67
0120	10-7/8" thick, R38	G		1800	.013		.93	.62	.30	1.85	2.28
1000	Fiberglass, 5.5" thick, R11	G		3800	.006		.24	.29	.14	.67	.87
1050	6" thick, R12	G		3000	.008		.35	.37	.18	.90	1.13
1100	8.8" thick, R19	G		2200	.011		.43	.50	.25	1.18	1.50
1200	10" thick, R22	G		1800	.013		.50	.62	.30	1.42	1.80
1300	11.5" thick, R26	G		1500	.016		.60	.74	.36	1.70	2.16
1350	13" thick, R30	G		1400	.017		.69	.79	.39	1.87	2.37
1450	16" thick, R38	G		1145	.021		.88	.97	.48	2.33	2.93
1500	20" thick, R49	G		920	.026		1.17	1.21	.59	2.97	3.74

## 07 21 29 – Sprayed Insulation

### 07 21 29.10 Sprayed-On Insulation

0010	SPRAYED-ON INSULATION										
0020	Fibrous/cementitious, finished wall, 1" thick, R3.7	G	G-2	2050	.012	S.F.	.46	.56	.07	1.09	1.41
0100	Attic, 5.2" thick, R19	G		1550	.015	"	.54	.74	.09	1.37	1.79
0200	Fiberglass, R4 per inch, vertical	G		1600	.015	B.F.	.26	.71	.09	1.06	1.44
0210	Horizontal	G	↓	1200	.020	"	.26	.95	.12	1.33	1.83
0300	Closed cell, spray polyurethane foam, 2 lb./C.F. density										
0310	1" thick	G	G-2A	6000	.004	S.F.	.70	.18	.11	.99	1.17
0320	2" thick	G		3000	.008		1.41	.35	.22	1.98	2.35
0330	3" thick	G		2000	.012		2.11	.53	.33	2.97	3.51
0335	3-1/2" thick	G		1715	.014		2.46	.62	.39	3.47	4.10
0340	4" thick	G		1500	.016		2.81	.71	.44	3.96	4.68
0350	5" thick	G		1200	.020		3.51	.88	.55	4.94	5.85
0355	5-1/2" thick	G	↓	1090	.022	↓	3.86	.97	.61	5.44	6.45
0360	6" thick	G	G-2A	1000	.024	S.F.	4.22	1.06	.66	5.94	7.05

## 07 21 53 – Reflective Insulation

### 07 21 53.10 Reflective Insulation Options

0010	<b>REFLECTIVE INSULATION OPTIONS</b>									
0020	Aluminum foil on reinforced scrim	G	1 Corp	19	.421	C.S.F.	19.05	23.50	42.55	56.50
0100	Reinforced with woven polyolefin	G		19	.421		30	23.50	53.50	69
0500	With single bubble air space, R8.8	G		15	.533		33.50	30	63.50	81.50
0600	With double bubble air space, R9.8	G		15	.533		40.50	30	70.50	89