

NOTE:
ALL QUANTITIES SHOWN ARE BASED ON
AN 8'x8'x8' SAFE ROOM.
QUANTITIES MAY VARY BY APPLICATION.

SAFE ROOM: LEAN-TO

WALL MATERIALS

MATERIAL	SIZE	MEASURE	QUANTITY	REMARKS
SYP. LUMBER	2" X 4" X 8'	EACH	26	
SYP. LUMBER	2" X 4" X 12'	EACH	2	
P.T. LUMBER	2" X 4" X 8'	EACH	4	
P.T. LUMBER	2" X 6" X 8'	EACH	1	
SYP. LUMBER	2" X 8" X 8'	EACH	1	
SYP. LUMBER	2" X 6" X 12'	EACH	9	
PLYWOOD	3/4"	4' X 8' SHEET	11	
STEEL SHEATHING	14 GA.	4' X 8' SHEET	7	

HARDWARE

MATERIAL	DIAMETER	LENGTH	MEASURE	QUANTITY	REMARKS
DOOR			EACH	1	MADE ON SITE
HINGES		MIN. 3/1/2" LONG	EACH	3	SEE DETAIL 3 ON DRAWING MS-01
SLIDE BOLTS/ DEADBOLTS			EACH	3	SEE DETAIL 3 ON DRAWING MS-01
ANCHOR BOLTS	1/2"	MIN. 2-1/8" EMBED.	EACH	20	SEE DETAIL 4 ON DRAWING B-01 MAX EMBED. DEPTH 3"
TYPE "A" CONNECTORS			EACH	9	SEE DETAIL 2 ON DRAWING MS-01
TYPE "B" CONNECTORS			EACH	9	SEE DETAIL 2 ON DRAWING MS-01
LAG BOLTS	1/2"		EACH	4	
16d NAILS			LB	10	

SAFE ROOM: CMU WALL ON SLAB-ON-GRADE

WALLS

MATERIAL	SIZE	MEASURE	QUANTITY	REMARKS
HOLLOW CMU	8" X 8" X 16"	EACH	240	W/ CONCRETE GROUT
REINFORCING BAR	#5	LINEAR FEET	120	
MORTAR MIX	80 LB	BAG	10	

SLAB-ON-GRADE FOUNDATION

MATERIAL	SIZE	MEASURE	QUANTITY	REMARKS
REINFORCING BAR	#4 X 3'	EACH	24	BENT 2' X 8"
CONCRETE		CUBIC YARDS	2	
WIRE MESH REINFORCEMENT	6"X6"-W2.9XW2.9	EA.	1	

ALTERNATIVE 1 REINFORCED CONCRETE CEILING

MATERIAL	SIZE	MEASURE	QUANTITY	REMARKS
REINFORCING BAR	#4 X 4'	EACH	24	BENT 2' X 2'
REINFORCING BAR	#4 X 8'	LINEAR FEET	96	
CONCRETE		CUBIC YARDS	1	

ALTERNATIVE 2 WOOD-FRAME CEILING

MATERIAL	SIZE	MEASURE	QUANTITY	REMARKS
SYP. LUMBER	2" X 6" X 8'	EACH	10	
PLYWOOD	3/4"	4' X 8' SHEET	4	
STEEL SHEATHING	14 GA.	4' X 8' SHEET	2	

HARDWARE

MATERIAL	MEASURE	QUANTITY	REMARKS
DEADBOLTS	EACH	3	SEE DETAIL 3 ON DRAWING MS-01
DOORFRAME	EACH	1	SEE DETAIL 1 ON DRAWING AG-01
DOOR	EACH	1	SEE DETAIL 1 AND 2 ON DRAWING MS-02
TYPE "D" CONNECTOR*	EACH	20	SEE DETAIL 2 ON DRAWING MS-01 USE TYPE "C" AND "M" WHEN LEDGER IS USED

* REQUIRED ONLY FOR ALTERNATIVE (1 OF 2) WOOD-FRAME CEILING

CHASE WALL

MATERIAL	SIZE	MEASURE	QUANTITY	REMARKS
P.T. LUMBER	2" X 6" X 8'	EACH	1	
SYP. LUMBER	2" X 6" X 8'	EACH	10	

SAFE ROOM: CONCRETE WALL ON SLAB-ON-GRADE

WALLS

MATERIAL	SIZE	MEASURE	QUANTITY	REMARKS
CONCRETE		CUBIC YARD	5	
REINFORCING BAR	#4	LINEAR FEET	232	

SLAB-ON-GRADE FOUNDATION

MATERIAL	SIZE	MEASURE	QUANTITY	REMARKS
REINFORCING BAR	#4 X 3'	EACH	16	BENT 2' X 1'
REINFORCING BAR	#4 X 8'	LINEAR FEET	96	
CONCRETE		CUBIC YARD	2	
WIRE MESH REINFORCEMENT	6"X6"-W2.9XW2.9	EA.	1	

ALTERNATIVE 1 REINFORCED CONCRETE CEILING

MATERIAL	SIZE	MEASURE	QUANTITY	REMARKS
REINFORCING BAR	#4 X 4'	EACH	24	BENT 2' X 2'
REINFORCING BAR	#4 X 8'	LINEAR FEET	96	
CONCRETE		CUBIC YARD	1	

ALTERNATIVE 2 WOOD-FRAME CEILING

MATERIAL	SIZE	MEASURE	QUANTITY	REMARKS
SYP. LUMBER	2" X 6" X 8'	EACH	10	
PLYWOOD	3/4"	4' X 8' SHEET	4	
STEEL SHEATHING	14 GA.	4' X 8' SHEET	2	

HARDWARE

MATERIAL	MEASURE	QUANTITY	REMARKS
DEADBOLTS	EACH	3	SEE DETAIL 3 ON DRAWING MS-01
DOOR FRAME	EACH	1	SEE DETAIL 2 ON DRAWING AG-01
DOOR	EACH	1	SEE DETAIL 3 AND 4 ON DRAWING MS-01
TYPE "D" CONNECTOR*	EACH	20	SEE DETAIL 3 ON DRAWING USE TYPE "C" AND "M" WHEN LEDGER IS USED

* REQUIRED ONLY FOR ALTERNATIVE (1 OF 2) WOOD-FRAME CEILING

CHASE WALL

MATERIAL	SIZE	MEASURE	QUANTITY	REMARKS
P.T. LUMBER	2" X 6" X 8'	EACH	1	
SYP. LUMBER	2" X 6" X 8'	EACH	10	

MATERIALS LISTS

DRAWING NO: ML-01 SHEET 17 OF 18

DATE: OCTOBER 1998

REVISED: AUGUST 2008 REV. NO. 2



FEMA