ALL QUANTITIES SHOWN ARE BASED ON AN 8'x8'x8' SAFE ROOM.

QUANTITIES MAY VARY BY APPLICATION.

SAFE ROOM: WOOD-FRAME WITH CMU INFILL WALL ON SLAB-ON-GRADE

# SAFE ROOM: INSULATING CONCRETE FORMS ON SLAB-ON-GRADE

# INSULATING CONCRETE FORMS—FLAT WALL ALTERNATIVE

| MATERIAL                      | SIZE | MEASURE     | QUANTITY | REMARKS |
|-------------------------------|------|-------------|----------|---------|
| FORMS                         |      | SQUARE FEET | 256      |         |
| CONCRETE 4" FLAT WALL         |      | CUBIC YARDS | 3        |         |
| CONCRETE 6" FLAT WALL         |      | CUBIC YARDS | 5        |         |
| REINFORCING BARS 4" FLAT WALL | #4   | LINEAR FEET | 672      |         |
| REINFORCING BARS 6" FLAT WALL | #4   | LINEAR FEET | 528      |         |

## INSULATING CONCRETE FORMS—WAFFLE GRID WALL ALTERNATIVE

| MATERIAL                        | SIZE     | MEASURE     | QUANTITY   | REMARKS |
|---------------------------------|----------|-------------|------------|---------|
| FORMS                           |          | SQUARE FEET | 256        |         |
| CONCRETE 6"<br>WAFFLE GRID WALL |          | CUBIC YARDS | 3.5        |         |
| CONCRETE 8"<br>WAFFLE GRID WALL |          | CUBIC YARDS | 5          |         |
| REINFORCING BARS                | #4<br>#5 | LINEAR FEET | 416<br>256 |         |

#### SLAB-ON-GRADE FOUNDATION

| - 7 |                            |                     |             |          |         |
|-----|----------------------------|---------------------|-------------|----------|---------|
|     | MATERIAL                   | SIZE                | MEASURE     | QUANTITY | REMARKS |
|     | CONCRETE                   |                     | CUBIC YARDS | 2        |         |
|     | REINFORCING BARS           | #4                  | LINEAR FEET | 192      |         |
|     | WIRE MESH<br>REINFORCEMENT | 6"X6"-<br>W2.9XW2.9 | EA.         | 1        |         |

#### INSULATING CONCRETE FORM ROOF ALTERNATIVE

| MATERIAL         | SIZE     | MEASURE     | QUANTITY  | REMARKS |
|------------------|----------|-------------|-----------|---------|
| FORMS            |          | SQUARE FEET | 64        |         |
| CONCRETE         |          | CUBIC YARDS | 1         |         |
| REINFORCING BARS | #4<br>#5 | LINEAR FEET | 128<br>32 |         |

# FLAT CONCRETE ROOF ALTERNATIVE

| MATERIAL         | SIZE | MEASURE     | QUANTITY | REMARKS |
|------------------|------|-------------|----------|---------|
| CONCRETE         |      | CUBIC YARDS | 1        |         |
| REINFORCING BARS | #4   | LINEAR FEET | 128      |         |

## **HARDWARE**

| MATERIAL   | SIZE | MEASURE | QUANTITY | REMARKS                             |
|------------|------|---------|----------|-------------------------------------|
| DEADBOLTS  |      | EACH    | 3        | SEE DETAIL 3 ON DRAWING MS-01       |
| DOOR FRAME |      | EACH    | 1        | SEE DETAIL 1 ON DRAWING AG-01       |
| DOOR       |      | EACH    | 1        | SEE DETAIL 3 AND 4 ON DRAWING MS-01 |

## **WALLS**

| MATERIAL    | SIZE          | MEASURE       | QUANTITY | REMARKS     |
|-------------|---------------|---------------|----------|-------------|
| SYP. LUMBER | 2" X 4" X 8'  | EACH          | 38       |             |
| P.T. LUMBER | 2" X 4" X 8'  | EACH          | 4        |             |
| SYP. LUMBER | 2" X 6" X 8'  | EACH          | 1        |             |
| PLYWOOD     | 3/4"          | 4' X 8' SHEET | 24       |             |
| SOLID BLOCK | 4" X 8" X 16" | EACH          | 128      | DRY - STACK |
| SYP. LUMBER | 2" X 8" X 10" | EACH          | 2        |             |
| SYP. LUMBER | 1" X 4" X 8'  | EACH          | 19       |             |

#### **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            | DIAMETER | LENGTH                | MEASURE | QUANTITY | REMARKS                                 |
|---------------------|----------|-----------------------|---------|----------|---|
| DOOR FRAME          |          |                       | EACH    | 1        | SEE DETAILS 5 AND<br>6 ON DRAWING AG-05 |
| DOOR                |          |                       | EACH    | 1        | SEE DETAIL 3 AND 4 ON<br>DRAWING MS-01  |
| ANCHOR BOLTS        | 1/2"     | MIN. 2-1/8"<br>EMBED. | EACH    | 25       |   |
| TYPE "E" CONNECTORS |          |                       | EACH    | 2        | SEE DETAIL 2 ON<br>DRAWING MS-01        |
| TYPE "F" CONNECTORS |          |                       | EACH    | 14       | SEE ITEM 2 ON DRAWING MS-01             |
| TYPE "G" CONNECTORS |          |                       | EACH    | 14       | SEE DETAIL 2 ON<br>DRAWING MS-01        |
| DEADBOLTS           |          |                       | EACH    | 3        | SEE DETAIL 3 ON DRAWING MS-01           |
| 16D NAILS           |          |                       | В       | 20       |   |

#### 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: WOOD-FRAME WITH PLYWOOD AND STEEL SHEATHING WALL ON SLAB-ON-GRADE

## WALLS

| MATERIAL        | SIZE          | MEASURE       | QUANTITY | REMARKS |
|-----------------|---------------|---------------|----------|---------|
| SYP. LUMBER     | 2" X 4" X 8'  | EACH          | 58       |         |
| P.T. LUMBER     | 2" X 4" X 8'  | EACH          | 4        |         |
| PLYWOOD         | 3/4"          | 4' X 8' SHEET | 16       |         |
| STEEL SHEATHING | 14 GA.        | 4' X 8' SHEET | 8        |         |
| SYP. LUMBER     | 2" X 10" X 8' | EACH          | 2        |         |
| SYP. LUMBER     | 2" X 6" X 8'  | EACH          | 1        |         |

# **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               | DIAMETER | LENGTH                   | MEASURE | QUANTITY | REMARKS                                 |
|------------------------|----------|--------------------------|---------|----------|---|
| DOOR FRAME             |          |                          | EACH    | 1        | SEE DETAILS 5 AND 6 ON<br>DRAWING AG-05 |
| DOOR                   |          |                          | EACH    | 1        | SEE DETAIL 3 AND 4 ON<br>DRAWING MS-01  |
| ANCHOR BOLTS           | 1/2"     | MIN.<br>2-1/8"<br>EMBED. | EACH    | 25       |   |
| TYPE "E"<br>CONNECTORS |          |                          | EACH    | 2        | SEE DETAIL 2 ON<br>DRAWING MS-01        |
| TYPE "F"<br>CONNECTORS |          |                          | EACH    | 14       | SEE DETAIL 2 ON<br>DRAWING MS-01        |
| TYPE "G"<br>CONNECTORS |          |                          | EACH    | 14       | SEE DETAIL 2 ON<br>DRAWING MS-01        |
| DEADBOLTS              |          |                          | EACH    | 3        | SEE DETAIL 3 ON SHEET MS-01             |
| 16D NAILS              |          |                          | LB.     | 20       |   |

## 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-02 SHEET 18 OF 18

DATE: OCTOBER 1998

REVISED: AUGUST 2008 REV. NO. 2

