EARTH SHELTERED TECHNOLOGY, INC.

Box 5142
Mankato, MN 56001
507-345-7203    800-345-7203
(Fax) 507-345-8302

BOILER PLATE HANDBOOK

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Excavation

Excavation of all material from the front and sides of the house to the back of the house, far enough back to compensate for slides. Clear all trees, roots and rocks. Get the front and side yards bladed to the finish elevations grade. Build the road for permanent use, place a rock surface thick enough to support heavy concrete trucks, semi-trucks, and other traffic. Backhoe will be needed to excavate all footings, and pads. The average depth of the footings will be 12″ deeper than the finished grade on perimeter walls, and major pads.

After concrete footings and walls are poured, they will be waterproofed. The top of the house should cure for one month before attempting to fill and finish the roof. At the time of covering the roof the equipment used should be 10,000# or less, a skid-steer loader is best, as not to crush the insulation, due to tire ground pressure.
SITE PREPARATION

1. OVERSIZE PERIMETER EXCAVATION 6" O' ALL SIDES SLOPE BANKS 3' OR 4' TO 1' (SAFE SIDES)
2. BASE OF EXCAVATION TO BE SCRAPED LEVEL (1" ±) (NO FILL ADDED, UNLESS COMPACTED TO 97% PROCTOR) AT FOOTING LOCATION.
3. BACKHOE WILL BE NEEDED TO EXCAVATE FOOTING PADS ON EXPOSED (FRONT) WALLS.
4. EARTH SHELTERED TECHNOLOGY WILL PROVIDE SITE LAYOUT DIMENSIONS FOR EXCAVATION.
5. OWNER WILL DETERMINE FINISHED LOCATION AND ELEVATION, POWER LINE, PHONE, WATER & SEWER, ROAD & LANDSCAPING.
6. TREE, STUMP, ROCK & MISC. OBSTRUCTIONS TO BE REMOVED FROM SITE PRIOR TO ACTUAL CONSTRUCTION START.
6.1. DUE TO THE LARGE VOLUME OF FORMING EQUIPMENT, REINFORCING RODS, LARGE TRUCKS FOR CONCRETE DELIVERY CONCRETE PUMPING, AND STORAGE FOR PIPING, LUMBER, INSULATION & OTHER MATERIALS, SPACE CAN BECOME A FACTOR. EACH CRAFT WILL NEED TO GET IN, PARK, AND LEAVE WITHOUT BLOCKING ROAD. THIS IS THE REASON TO GET THE ROUGH LANDSCAPING DETERMINED PRIOR TO START UP.
7. AVERAGE FINISHED LANDSCAPE SLOPE IS 30' - 40' BEYOND WALL LINE OF THE HOUSE. IN SOME CASES THIS IS NOT PRACTICAL DUE TO OBSTRUCTIONS OF PROPERTY LINES, WATER WAYS, ROADS, BUILDINGS, OR TREES. THE BUILDING SITE IS ALWAYS PLANNED WITH THESE SITUATIONS AND VIEW IN MIND. YOUR SITE WILL HAVE ITS OWN SPECIFICS, AND MUST BE PLANNED TO ITS MAXIMUM HARMONY WITH NATURE AND PERSONAL DESIRE.
EXCAVATION CROSS SECTION
SCALE: NONE

EXCAVATION PLAN
SCALE: NONE
FILL AROUND DRAIN TILE WITH PEA GRAVEL. THEN ADD FILL UP TO TOP OF GRAVEL. COMPACT GRAVEL.

PLACE 6" TO 12" SAND ON TOP OF GRAVEL. ADD FILL TO LEVEL OF SAND. COMPACT SAND.

PLACE 6" TO 12" SAND ON TOP OF 1ST LAYER OF SAND. ADD FILL TO LEVEL OF SAND. COMPACT SAND. REPEAT THIS STEP TO WITHIN ONE FOOT OF ROOF LINE.
Footings & Concrete

Electrician, heating and plumbing contractors may have pipe or pipe sleeves needed to go through or into the house footings.

Items to consider:

Vents for hot air near perimeter of walls, main trunk-line, cold air return, fireplace hot air return back to air handler for distribution of hot air throughout the house. Kitchen intake air exhaust for hood fan or other type of stove vent. Bath exhaust, and other roof vents. Electrical sleeve for power line, telephone, television cable, outside lighting, well power, out buildings or signal switch.

Plumbing vents and block-outs for:

Floor drain, toilet, sewer line, hose bib, sink, dishwasher, garbage disposal, laundry tray sink, washer, tub shower combo, whirlpool, pressure tank and water supply.
Structural Calculations for Walls

Lateral Soil Load: 15 psf/ft for Well-Drawn Conditions

\[ R_t = 1755 \text{ psf} \]

Horizontal Steel:
- \( x = 16 ', M = 3280 \text{ ft-lbs}, V = -1575 \text{ lbs} \)
- \( x = 19 ', M = 6020 \text{ ft-lbs}, V = -1215 \text{ lbs} \)

Vertical Steel:
- \( x = 12 ', M = 8100 \text{ ft-lbs}, V = -885 \text{ lbs} \)
- \( x = 10 ', M = 9400 \text{ ft-lbs}, V = -435 \text{ lbs} \)
- \( x = 8 ', M = 9800 \text{ ft-lbs}, V = 455 \text{ lbs} \)
- \( x = 6 ', M = 9180 \text{ ft-lbs}, V = 585 \text{ lbs} \)
- \( x = 4 ', M = 7400 \text{ ft-lbs}, V = 1185 \text{ lbs} \)
- \( x = 2 ', M = 4440 \text{ ft-lbs}, V = 1845 \text{ lbs} \)

Vertical Pressure:
- \( R_b = 2565 \text{ psf} \)

Footing:
- \( 4 \# 5 \text{ at } 5 1/2' \text{ o.c.} \)
- \( 2 \# 8 1/4' \text{ o.c.} \)
- \( 2 \# 6 \text{ at } 12' \text{ o.c.} \)

Scale: \( 1/4'' = 1' - 0'' \)
OPTION #1

WATERPROOFING

GRANULAR PENTONITE 2" X 2"

EXISTING GRADE

4" GRANITE W/ 6" MIN. ROCK OVER

OPTION #2

WATERPROOFING

9" CONC. FLOOR

6" SAND, GRAVEL UNDER FLOOR

SAND, PENTONITE OR POLY SET ON FSG PRIOR TO FLOOR POUR

EXISTING GRADE

NOTE: SPARKLE SAND ON TOP OF FOOTING TO PREVENT Poured FLOOR FROM ADHERING TO FOOTINGS

GRAVEL FILL AS REQ'D

9½" CONC. FLOOR
TOP VIEW-DOME CORNER STEEL

GRID OF #3 @ 12" O.C.
E.W. Bot. Or Equiv

STEP ONE

4 CORNERS PLUS
4-#4 45 DEG @ 9" TOP

STEP THREE

20'-0"

6-#4 @ 9" O.C. BOTTOM

STEP TWO

SCALE: NONE

1
TYPICAL WALL SECTION

NOTE: CORNER STEEL TO BE ATTACHED TO WALL STEEL @ 12" O.C.

#4 @ 12" O.C. E.W. PLACED 2" FROM INSIDE FROM

TOP ALL WALLS

8'-0" OR 7'-8"

#4 DOWEL @ 12" O.C.

1'-6"

9'-5/8"

SCALE: 1/2" = 1'-0"
EARTH COVERED WALL / DOME DETAIL

INSULATION
WIDTH VARIES
FROM 4" TO 6"

6 MIL POLY &
BENTONITE

GRID OF #5 @
12" O.C. OR
EQUIV. @ DOT.

4 #5 @ 6" O.C.

#4 @ 12" O.C. E.W.
W/ 1" CUR. COVER FROM
FORM OR EQUIV.; FOR 2
STORY USE #6

20 MIL POLY
ON WALL &
2" O" ON DOME

9 5/8"

SCALE: 1" = 1'-0"

F-13
6" POST DETAIL

SCALE: 1/2" = 1'-0"
1. **Standard Wall Openings**

   - Scale: 1" = 1'-0"

   - Load/Pressure (Equal)

   - Grid of #5 @ 12" O.C. E.W. or equivalent 1" from boy.
   - 4 @ 8" O.C.
   - Grid of #5 @ 12" O.C. or equivalent
   - #4 @ 12" O.C. E.W. or equivalent w/ 1" clr cover from form

2. **Monolithic Parapet Wall on Side Wall**

   - Scale: 1" = 1'-0"

   - Load/Pressure (Outward)

   - Alternate Hi/Lo 12" O.C.
   - 4 @ 5" O.C. on wall against backfill is needed
   - Grid of #3 @ 12" O.C. E.W. boy or equiv.
   - #4 @ 12" O.C. E.W. w/ 1" CLR cover from form

   - Parapet wall 3'-0" max. height earth face

   - Extend #4 @ 12" O.C. to top of parapet wall

   - Back fill side-dome wants to push outward

   - 9 5/8"
Plumbing

Plumbing and heating:

The venting in this type of construction is somewhat different than frame built. Where this is most noticed, the vent pipes and sleeves must be placed into the forms during the setup. Also, roof vents and sleeves are placed during the setup. The poured walls are 9 5/8" thick, the dome is 14" thick at the base and tapers to 6" thick at the apex.

Most common vents are:

- Furnace vents and fuel supply sleeves
- Bath fan
- Fireplace chimney and air supply
- Toilet, shower, sink and tub
- Kitchen hood fan, with fresh air supply
- Air conditioner sleeve for copper lines
- Water heater chimney
- Central vacuum exhaust sleeve

Some of the vents require intake air as well as exhaust. On all vents where moisture may condense inside of the pipe, water damage may occur. In order to prevent this from happening, these precautions will help. Where vent pipes extend through the roof, a 90 degree street elbow is glued to riser, with a tee glued in a
vertical position onto the elbow. Then a pipe extension is glued upward into the tee, this should extend 7 feet above the concrete dome. The bottom of the tee should have a 12” pipe glued into it. This is best done to all vents except waste line vents.

Plumbing rough-in measurements (unless plan specs otherwise)

1. Toilet drain from center line of drain to finished wall -12”.
2. Toilet water supply 6” high from finished floor.
3. Toilet water supply 6” to left of center line of toilet as you face the drain.
4. Water supply 2” out from finished wall.

Wash Basin:

1. Basin drain line from finished floor – 18”.
2. Basin water supply from finished floor – 22”.
3. Basin water supply 4” from center line left & 4” right.
4. Basin trap size 1 ½” = 1 ½” x 1 ½” reducing slip nut and washer to convert to 1 ½” drain.
5. Basin line size 1 ½”.
6. Basin water supply 2” out from finished wall.
7. If basin is wall hunt – put hangers 33” up from finished floor.
Kitchen Sink:

1. Kitchen sink drain with garbage disposal 16” high from finished floor.
2. Kitchen sink drain line size 2”.
3. Sink trap size 1 ½”.
4. Kitchen sink without garbage disposal 21” from finished floor.

Bathtubs:

1. Tub trap size 1 ½” P trap.
2. Tub drain line size 1 ½”.
3. Tub drain in floor 3” below finished floor level.
4. Tub spout 5” above edge of tub.
5. Rub faucets 10” above top edge of tub.

Showers:

1. Trap size 2”.
2. Drain size 2”.
3. Drain line 2”.
4. Shower head from finished floor 78”.
5. Shower head from faucets to head 48”.
Toilets, washbasins, shower and floor drains under concrete floor:

1. All drain lines should be pitched ¼" per foot (1" in 4')
2. Drain lines should be installed with wye fittings where you connect drain lines together
3. Toilet drain lines should not be over 7 feet from main sewer line, if it is over 7 feet it has to be vented.
4. Washbasins and showers should also be vented in basement.

O.K., before another re-vent is needed:

<table>
<thead>
<tr>
<th>1 ½&quot; – 3'6&quot;</th>
<th>3' – 7'</th>
</tr>
</thead>
<tbody>
<tr>
<td>2&quot; – 5'0&quot;</td>
<td>4' – 7'</td>
</tr>
</tbody>
</table>

*A 2" floor drain maybe 15' away from stack without re-venting.

Use TYPE “K” copper (green stripe) BELOW FLOOR IN INSULATION OR SLEEVE (no fittings or coupling under floor surface).
Use TYPE “L” copper (blue stripe) below and above ground.
Use TYPE “M” copper (red stripe) in areas above ground.
FIBERGLASS TUB DETAIL

SCALE: 1/2" = 1'-0"

2" X 4" @ 16" O.C.
STUD WALL

2" X 6" RACER SHOWER DOOR

FIBERGLASS TUB

1" BEAD BOARD

5 1/2" CONC. SLAB

P-5
BATHTUB ROUGH-IN DETAIL

SCALE: 1/2" = 1'-0"

1. FINISH FLOOR LINE
2. 2 X 4 STUDS @ 16" O.C.
3. 1 X 8 BACKER CENTERED 4" ABOVE SID EDGE TO MOUNT FITTINGS
4. 2 X 4 BRACKETS TO SUPPORT BACK OF TUB
5. 3 1/2" CONCRETE
6. 1" BEAD BOARD
Electrical

Once the footing work is complete with all block-outs and conduits in place, the wall forms will be set in place. When the inside wall forms are connected and wall steel is tied to the forms, the electrician can begin.

The layout of the wall boxes should be done first, so any re-rod in the way can be relocated. When the areas are cleared you may attach boxes and sleeves to the wall. Boxes and forms should be drilled with a one quarter inch bit. Use a machine screw long enough to penetrate the box, form, plus ¼". Fasten connectors to the box, fill the box with paper or fiberglass insulation and attach box to the wall. (Nut on inside of house) After the conduit is secured you may layout the boxes for the ceiling and attach the conduit. (NO HOLES MAY BE DRILLED IN THE DOME) Conduit and boxes couplers are very tight and taped.

After the walls and dome are poured we will strip the forms and the process starts again.

Electrical Notes:

1. Ground all outlets.
2. No more than 12 feet apart.
3. 12” high center line of outlet to finished floor.
4. Switches- 48” centerline on switch (on knob side of door) to finished floor.
5. Outlets above sink 8” and 48” apart.
6. Put 8 outlets on one circuit.

7. Split kitchen circuits = 2
   Dishwasher = #12 wire
   Garbage disposal = #12 wire

<table>
<thead>
<tr>
<th>Number of wires in conduits:</th>
</tr>
</thead>
<tbody>
<tr>
<td>½&quot; conduit:</td>
</tr>
<tr>
<td>4 - #14 wire</td>
</tr>
<tr>
<td>3 - #12 wire</td>
</tr>
<tr>
<td>1 - #10 wire</td>
</tr>
<tr>
<td>1 - #8 wire</td>
</tr>
<tr>
<td>1 - #6 wire</td>
</tr>
<tr>
<td>? - #16 or #18 wire</td>
</tr>
<tr>
<td>½&quot; Conduit:</td>
</tr>
<tr>
<td>5 - #14 wire</td>
</tr>
<tr>
<td>4 - #12 wire</td>
</tr>
<tr>
<td>2 - #10 wire</td>
</tr>
<tr>
<td>1 - #8 wire</td>
</tr>
<tr>
<td>1 - #6 wire</td>
</tr>
<tr>
<td>? - #16 or #18 wire</td>
</tr>
</tbody>
</table>

#12 wire = 20 amps = 24 – 100 watt bulbs

#14 wire = 15 amps = 18 – 100 watt bulbs

<table>
<thead>
<tr>
<th>Color of wire:</th>
<th>Color of Terminal or screw:</th>
<th>Hot, Neutral or</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>White or silver</td>
<td>Neutral</td>
</tr>
<tr>
<td>Black</td>
<td>Brass</td>
<td>Hot Wire</td>
</tr>
<tr>
<td>Red</td>
<td>Brass</td>
<td>Hot Wire</td>
</tr>
<tr>
<td>Green</td>
<td>Green</td>
<td>Ground Wire</td>
</tr>
<tr>
<td>Bare Wire</td>
<td>Electrical box ground</td>
<td>Ground Wire</td>
</tr>
</tbody>
</table>
ONE EXCEPTION TO THIS RULE OF THUMB IS:

IF THE POWER SOURCE GOES FIRST THROUGH THE LIGHT FIXTURE AND THEN TO THE SWITCH, YOU HAVE TO USE A "WHITE" WIRE AS A HOT BLACK WIRE, IN THIS CASE PUT BLACK TAPE ON WHITE WIRE ENDS TO IDENTIFY THAT THE WIRE IS HOT.

Three way wire:
White – Neutral
Black – Hot
Red – Hot
Ground – Copper

Electric dryers use #10 – 3 w/g = 30 amps
Electric ranges use #6 – 3 w/g = 50 amps
ELECTRICAL - OVERHANG/PARAPET/EXT. WALL

SCALE: 1" = 1'-0"
ELECTRICAL - TYPICAL WALL SECTION

SCALE: 1/2" = 1'-0"
Carpentry

When all the layout is complete and the lines are snapped here are some changes to consider.

On all frame walls that connect from the floor to the ceiling you should put ½” polystyrene (bead-board) under the sole plate, this cushion is to absorb any pressure from settling. The same thing should be on any wall that is framed between concrete tip and concrete floor. The same for sheetrock, it should also be off the floor 1”.

The cabinet wall should also be a wood frame wall, this is done for ease in wiring, plumbing and attaching wall cabinets. Framing for exterior doors and windows may be different than standard practice. The concrete walls are 9 5/8” thick with an additional 3” of rigid insulation attached to the exposed exterior walls. Additional ½” of stucco lath and stucco will be on the insulation. So you must compensate for this or any other type of siding.

The sheetrock on the exposed walls should be screwed to the framing and glued to the concrete. Caution should be used so no joints stop at the junction of concrete and framing.

Base trim is best secured by drilling 1/2” hole in the concrete then glue a dowel and hammer it into the hole to its depth. Once the base is cut and fitted, use adhesive on the trim and nail into the dowel. This has proven to be the best method.
INTErior STUD WALL SECTION
Scale: 1/2" = 1'-0"

1 2x6 JOISTS @ 16" O.C.

2x9 @ 8" O.C.

1/2" DOWEL FOR BASE NAILER

BASE TRIM

2x9 TOP PLATES

1/2" WALL BOARD

5/4" BEAD BOARD WHEN FRAMING IS CONT. FL. TO DOME

5 1/2" CONC. PL.

PLYWOOD W/ ADHESIVE

1" GRIPCON NAIL

1/4" PLYWOOD

NOTE: TOE NAIL STUDS

LOFT
WALL BOARD OFF FLOOR 5/4" 

2 X 7 STUDS @ 16" O.C. 

3 1/4" BASE - BOARD 18M 

SOIL PLATE W/ 5/8" GRIPCON NAILS 16" O.C. 

3/4" BEAD BOARD, GLUED TO PLATE OF FLOOR 

NOTE: BEAD BOARD REQ'D WHERE FRAME WALL EXTENDS FROM FLOOR TO CLING OR CONC. TO CONC. AS IN WINDOW OPENINGS, THE REASON IS THAT THE HEEL MAY SETTLE. 

CONC. TO CONC. STUD DETAIL 

SCALE: 3" = 1'-0"
NOTE: USE 5 1/2" GRIPCON NAILS THROUGH WALL STUD & SOLE PLATE @ 16" O.C.

WALL STUD / SOLE PLATE ELEV

SCALE: 5" = 1'-0"
FOOTING FOR ADJUSTABLE STEEL POST

SCALE: 1/4" = 1'-0"

FLUSH HEADER DET.

SCALE: 1/4" = 1'-0"
WINDOW SIDE JAMB @ CONC. WALL

SCALE: 5" = 1'-0"
WDW HEAD JAMB & SILL SECTION W/ EXTENDED OAK JAMB

SCALE: 3" = 1'-0"
1. Typical Exterior Door Detail
   Scale: 11/2" = 1'-0"
   - 5" Expanded Foil, Inc.
   - 9 9/8" Conc. Header
   - 1/2" Gypsum Board With 1/8" Plaster Compound Over
   - 2x10 & 2x4 Blocking
   - 1/2" Plywood
   - 5 1/2" Conc. slab
   - Threshold
   - 2x10 treated

2. Typical Interior Door Cross Section @ Conc. Wall
   Scale: 11/2" = 1'-0"
   - 2x10 treated BMW, remove
   - 2x4 cripple
   - 2x4
   - Door
   - Tie-in
   - Gap on both sides

Note: Add 9" 10 L.D. of Door = M.O. use 4 9/16" Jamb Width
BY-PASS DOOR DETAIL

SCALE: 3" = 1'-0"

<table>
<thead>
<tr>
<th>DOOR SIZE</th>
<th>DIM. &quot;A&quot; R.O.</th>
<th>DIM. &quot;B&quot; R.O.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4'-0&quot; x 6'-0&quot;</td>
<td>5'-0&quot;</td>
<td>4'-111/2&quot;</td>
</tr>
<tr>
<td>5'-0&quot; x 6'-0&quot;</td>
<td>4'-0&quot;</td>
<td>9'-111/2&quot;</td>
</tr>
<tr>
<td>6'-0&quot; x 6'-0&quot;</td>
<td>9'-0&quot;</td>
<td>6'-111/2&quot;</td>
</tr>
</tbody>
</table>

USE 1/2" BLOCKING UNDER FLOOR GUIDE IN AREA OF CARPET
OVERHEAD DOOR-HEAD & SILL SECTION

DOOR STOP SHOULD BE FASTENED TEMPORARILY UNTIL DOOR IS INSTALLED SO ADJUSTMENT CAN BE MADE.

SCALE: 5" = 1'-0"

C-15
NOTES:

1. ADJOINING VERTICAL STILES ON ALL BASE & WALL CABINETS MUST BE FASTENED TOGETHER W/ A MIN. OF (2) 3" WOOD SCREWS.
2. DO NOT USE NAILS TO INSTALL CABINETS.
3. VERIFY DIMENSIONS ON SITE.
4. PLACE THE 2 X 4 BLOCKING (TREATED) IN CONC. AT THE SAME DIMENSIONS IF CABINETS ARE PLACED AGAINST THE 9 3/8" CONC. WALL.

TYPICAL CABINET INSTALLATION

SCALE: 3/4" = 1'-0"
POCKET DOOR DETAIL

SCALE: 3" = 1'-0"

<table>
<thead>
<tr>
<th>DOOR SIZE</th>
<th>ROUGH OPENING WIDTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>2'-0&quot;</td>
<td>4'-11/2&quot;</td>
</tr>
<tr>
<td>2'-4&quot;</td>
<td>4'-9/2&quot;</td>
</tr>
<tr>
<td>2'-6&quot;</td>
<td>5'-11/2&quot;</td>
</tr>
<tr>
<td>2'-8&quot;</td>
<td>5'-9/2&quot;</td>
</tr>
<tr>
<td>3'-0&quot;</td>
<td>6'-11/2&quot;</td>
</tr>
</tbody>
</table>
NOTE: IF CONC. WALL, PLACE 2 X 4 OR 2 X 2 STRIPS IN WALL @ 12" - 16" O.C.; Poured into Wall.

SOFFIT STORAGE DETAIL

SCALE: 5" = 1'-0"
NOTE: ALL DIMENSIONS GIVEN ARE TO FINISHED GYP. BOARD WALLS
2 STORY TRUSS DETAIL

SCALE: 1/2" = 1'-0"

2 STORY TRUSS PLAN DETAIL

SCALE: 1/2" = 1'-0"
Stucco and Plaster

As a result of building these homes in several states we have discovered there is one proper way that works. That is to sue stucco metal lath on all exterior surfaces. With the extreme weather, humidity and freeze/thaw problems we experience there seem to be few choices. Therefore, to figure this job and know it will last for decades, use galvanized metal lath. The mix of stucco contractors varies through the states, but this is a design mix that has worked in the past and is still working.

Brown and Scratch Coat at 900 square feet
24 bags type M mason cement
4 ½ tons of plaster sand
2 gallons Acryl 60.
Water

Ratio: 3 sand = 1 Mason = Acryl 60. = water to proper handling

Finish Coat at 900 square feet
2 ½ bags white Portland type I
3 ½ bags lime
6 ½ bags silica sand

Ratio: 1 Portland = 2 lime = 3 silica = Acryl 60. = plus water

Home owners may want colored stucco, we have found THORO to have good quality cover coat that lasts. In some areas a sealer may be used to delay or stop fading and staining.
**EXTERIOR STUCCO APPLICATION**

**SCALE: 1/2" = 1'-0"**

- **NOTE:**
  - Apply brown/scratch/finish coat stucco over lath
  - 5" ripped + 1/2"
  - Plywood = 5" same as insul. width

- **STUCCO MOLD OR IRON**
  - F.G. INSUL
  - 1/2" CPX SHEG
  - 4 MIL. POLY OR 15# FELT
# PLANNING YOUR HOME

<table>
<thead>
<tr>
<th>Windows</th>
<th>Style</th>
<th>Exterior Color</th>
<th>Screens</th>
<th>Jam Size</th>
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<tbody>
<tr>
<td>Andersen</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Marvin</td>
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<td>Pella</td>
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<tr>
<td>Eagle</td>
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<tr>
<td>Other</td>
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</tbody>
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## PLUMBING FIXTURES:

<table>
<thead>
<tr>
<th>Name</th>
<th>No.</th>
<th>Location</th>
<th>Make</th>
<th>Mfg No.</th>
<th>Size</th>
<th>Vent Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kitchen Sink</td>
<td></td>
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<td></td>
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<tr>
<td>Lav. Sink</td>
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<tr>
<td>Bath Tub</td>
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PLUMBING FIXTURES (Continued):

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<th>Name</th>
<th>No.</th>
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<th>Make</th>
<th>Mfg No.</th>
<th>Size</th>
<th>Vent Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tub &amp; Shower</td>
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<tr>
<td>Toilet</td>
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<tr>
<td>Laundry Tray</td>
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<tr>
<td>Jacuzzi</td>
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<td>Sauna</td>
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<td>Water Softener</td>
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<tr>
<td>Water Heater</td>
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<td>Pressure Tank</td>
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<tr>
<td>Bathroom Fan/Light Exhaust</td>
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<tr>
<td>Other</td>
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</table>

FAUCETS:

| Kitchen           |     |          |      |         |      |           |
| Lav. Sink         |     |          |      |         |      |           |
| Bath Tub          |     |          |      |         |      |           |
FAUCETS (Continued):

Tub & Shower

Shower Stall

Laundry Tray
Whirlpool
Hot Tub

ON ALL PLUMBING FIXTURES, PLEASE FURNISH A COPY OF DESCRIPTIVE LITERATURE WITH MOUNTING SPECIFICATIONS.

APPLIANCES:

<table>
<thead>
<tr>
<th>Name</th>
<th>No.</th>
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<th>Make</th>
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<th>Size</th>
<th>Vent Size</th>
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<td>Washer</td>
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<td>Jenn Aire</td>
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<tr>
<td>Refrigerator</td>
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<td>Dishwasher</td>
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<tr>
<td>Hood Exhaust</td>
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CABINETS AND VANITIES:

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<th>Quantity</th>
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KITCHEN CABINET EXTRAS:

- Lazy Susan-Upper Cabinet, Lower Cabinet
- Appliance Garage-Straight, Corner Unit
- Pantry Unit
- Bread Board
- Captain’s Rail
- Other

COUNTERTOPS:

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<th>Mfg.</th>
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<th>Color</th>
<th>Location</th>
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<tbody>
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LIGHT FIXTURES:

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LIGHT FIXTURES (Continued):

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Floor Outlets Required:

Service size and Location:

Doorbell Location:

Smoke Alarm Locations:

Exterior Lights and Outlets:

TV/Cable Jacks:

Ceiling Lights Required:

Special locations for outlets such as for computers etc.

220 Outlets Required:

Other:

DOORS:

<table>
<thead>
<tr>
<th>Interior</th>
<th>Style</th>
<th>Size</th>
<th>Mfg. #</th>
<th>Color/Wood</th>
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DOORS (Continued):

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INTERIOR TRIM:

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FLOOR COVERINGS:

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<th>Grade</th>
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<tbody>
<tr>
<td>Carpet</td>
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<tr>
<td>Vinyl/Tile</td>
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### FLOOR COVERINGS (Continued):

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<tr>
<td>Quarry Tile</td>
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<td>Ceramic Tile</td>
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### HEATING AND COOLING:

- **Furnace**
  - Natural Gas
  - L.P.
  - Electric
  - Hot Water
  - Fuel Oil

- **Wood Stove**

- **Fireplace**

- **Air Conditioner**

- **Other**

### ON ALL APPLIANCES AND HEATING/COOLING EQUIPMENT, PLEASE FURNISH A COPY OF THE DESCRIPTIVE LITERATURE WITH MOUNTING SPECIFICATIONS AND DIMENSIONS.

### EXTERIOR FINISH:

- Stucco.
- Stone.
- Cedar.
- Brick.
- Split Log.
- Field Stone.

- Quarry Stone.
- and/or Other
**EXTERIOR FLATWORK:**

<table>
<thead>
<tr>
<th>Location</th>
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<tbody>
<tr>
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<td>Turn-Around:</td>
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<td>Other:</td>
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**ADDITIONAL NOTES:**

...