



WEBER STATE UNIVERSITY
— PARSON —
CONSTRUCTION
MANAGEMENT TECHNOLOGY



CMT 1210 Glossary Project

Spencer Easton

1. Materials Check List
2. 30 Glossary Pages

MATERIALS CHECK LIST

Materials Check List

DIVISION 01 - CONCRETE
(Minimum 1)

☒ Forms

☐ Plywood wall or column forms

☐ Metal wall or column forms

☐ Polystyrene forms

☐ Reinforcement

☐ Column tie

☐ Reinforcing bar support

☐ Fastening mat

☐ Dowels

☐ Hold-down

☐ Welded wire reinforcement

1 ☒ Anchor bolt

2 ☐ Concrete structures

3 ☐ Footing

4 ☐ Wall

5 ☐ Column

☐ Beam

☐ Miscellaneous

☐ Concrete pump

☐ Key

☐ Control joint

DIVISION 04 - MASONRY
(Minimum 2)

4 ☐ Running bond

5 ☐ Stacked bond

☐ Soldier course

☐ Bow-tie course

☐ Control joint

☐ Precast concrete block

☐ Steel brack

☐ Masonry tie

DIVISION 05 - METALS (None)

☐ Steel column

☐ Angle

☐ Ribbed wall

☐ Ribbed connection

☐ Open web joist

☐ Steel deck

DIVISION 06 - WOOD, PLASTIC, OR COMPOSITES (1 Required)

7 ☐ Lumber grade mark

☐ Plywood

☐ Oriented strand board (OSB)

☐ Particle board

24 ☐ Laminated veneer lumber

☐ Composite

8 ☐ Wood beam

☐ Wood column or post

☐ Metal post cap

☐ Sill

☐ Floor joist

☐ Metal joist hanger

9 ☐ Bottom or side plate

☐ Stud

☐ Double top plate

☐ Firestop

☐ Header

☐ Ceiling joist

☐ Rafter

☐ Bird's-mouth rafter cut

☐ Hip rafter

☐ Valley rafter

☐ Ridge board

☐ Lookout

☐ Wood frame truss

☐ Truss

☐ Soffit

☐ Bulk carriage or stringer

☐ Joint

☐ Diver joint

12 ☐ Crown molding

☐ Wood base

☐ Casing

18 ☐ Cabinets

DIVISION 27 - THERMAL & MOISTURE PROTECTION
(1 Required)

☐ Rigid insulation board

☐ Insulation blanket

☐ Sealant (Caulk)

☐ Asphalt/fiberglass shingles

☐ Asphalt coated felt

10 ☐ Drip edge

11 ☐ Metal valley flashing

☐ Wood shakes

☐ Concrete roofing tiles

DIVISION 08 - OPENINGS
(1 Required)

☐ French door

☐ Sile and roll panel door

☐ Overhead door

☐ Wood window

11 ☐ PVC window

☐ Casement window

DIVISION 09 - FINISHES
(1 Required)

21 ☐ Joint stud

22 ☐ Suspended ceiling

☐ Gypsum wallboard

☐ Metal lurring channel

☐ Metal lath

☐ Plaster

☐ Suspended metal grid

☐ Ceramic tile

☐ Hardwood flooring

☐ Resilient flooring

☐ Terrazzo floor

☐ Marble

26 ☐ Carpet

DIVISION 10 - SPECIALTIES
(None)

13 ☐ Direct vent gas fireplace

DIVISION 11 - EQUIPMENT
(None)

☐ Kitchen appliances

DIVISION 12 - FURNISHINGS
(None)

☐ Window Treatments

DIVISION 13 - SPECIAL CONSTRUCTION (None)

☐ Solar panel

DIVISION 21 - FIRE SUPPRESSION
(None)

17 ☐ Fire alarm

☐ Sprinkler head

DIVISION 22 - PLUMBING
(1 Required)

☐ Fittings and Valves

21 ☐ 90° elbow

20 ☐ Tee

☐ Pressure reducing valve (PRV)

☐ Equipment and fixtures

20 ☐ Expansion tank

☐ Lavatory

☐ Sinks

11 ☐ Toilets/water closet

DIVISION 23 - HEATING, VENTILATING, AND AIR CONDITIONING
(1 Required)

16 ☐ Furnace

☐ Heat pump

☐ Air conditioner condenser

☐ Split

21 ☐ Thermostat

22 ☐ Sheet metal ductwork

☐ Radiant heat

DIVISION 24 - ELECTRICAL
(1 Required)

☐ Plastic conduit

☐ Electric metallic tubing (EMT)

☐ Flexible metal conduit

☐ Duplex outlet

☐ 220v outlet

☐ Luminaire

☐ Circuit breaker

DIVISION 31 - EXCAVATION (None)

☐ Sheet piling

☐ Dewatering pump

DIVISION 32 - SITE IMPROVEMENTS
(1 Required)

6 ☐ Concrete paving

☐ Concrete curb and gutter

- Anchor Bolts
- Footing
- Concrete Wall
- Running Bond
- Stacked Bond
- Lumber Grade Mark
- I Joist
- Wood Beam
- Stud
- Crown Molding
- Cabinets
- Asphalt coated felt
- Drip Edge
- PVC Window
- Suspended ceiling
- Gypsum wallboard
- Carpet
- Direct vent gas fireplace
- Fire Alarm
- 90° Elbow
- Tee
- Expansion tank
- Toilet
- Furnace
- Thermostat
- Sheet metal ductwork
- Duplex outlet
- Luminaire
- Circuit Breaker
- Concrete Paving

ANCHOR BOLTS

- **Definition** (Modern Carpentry, 11th edition)

Bolts embedded in concrete to keep structural members in place

- **My Definition**

The medium to which the frame of the house is fastened to the foundation

- **Location**

Embedded in the concrete on the perimeter of house and wherever structural walls are to be built.

- **Basic Installation**

After the concrete foundation has been poured take the end of the anchor that will be inserted in the concrete and insert them leaving enough length of anchor to go through the the faming member.Tamp with a hand trowel around the anchor after being inserted as to smooth out any rough surfaces made by inserting the anchor in the wet concrete. Drill hole in the member, or sill that will be bolted down and screw bolt onto the anchor and fasten tight.

http://www.ehow.com/how_5729287_use-anchor-bolts-concrete.html

- **Related Terms**

1. Stud; One of a series of vertical structural members in walls and partitions.

(Modern Carpentry, 11th edition)

2. Drill; An instrument with an edged or pointed end for making holes in hard substances by revolving or by a succession of blows (www.merriam-webster.com)



Anchor Bolts: June 1, 2013 SS Builders

FOOTING

- **Definition** (Modern Carpentry, 11th edition)

Enlargement of concrete poured at base of the foundation wall, pier, or column that supports the structure while distributing the weight to the soil.

- **My Definition**

A big concrete structure that is beneath the foundation to help the building not sink over time and stay sturdy.

- **Location**

Poured around the perimeter, and where the foundation needs added strength. Concrete walls and foundation sit on top of footings. In other buildings there are various locations of footings due to different stresses on the structure.

- **Basic Installation**

Excavate a hole in the existing ground so fit the entire footing, forms and supports. Take a tamping device and level and compact the base floor to grade specified. Pull string line where forms should be and stake them down so that the concrete that will be poured can withstand the weight and pressure. Then concrete is poured. Work from one end of the footing to the other in a zigzag pattern. Even out high spots and fill gaps. Then cure the footing for four days after.

- **Related Terms**

1. Cement; A powder of alumina, silica, lime, iron oxide, and magnesium oxide burned together in a kiln and finely pulverized and used as an ingredient of mortar and concrete; also : any mixture used for a similar purpose. (Modern Carpentry, 11th edition)

2. Rebar; A steel rod with ridges for use in reinforced concrete

(www.merriam-webster.com)



Footing: June 1, 2013 SS Builders

http://www.ehow.com/how_2212394_pour-concrete-footing.html#ixzz2WQ3p4ruI

CONCRETE WALL

- **Definition** (Modern Carpentry, 11th edition)

The masonry or concrete walls below ground level that serve as the main support for a structure. Foundation walls also form the sides of a basement area.

- **My Definition**

Slab on grade construction including concrete walls formed right on the footings. This is the structured system that keeps the basement walls from caving in.

- **Location**

On top of the footings and foundation up to the main floor of the residential building. The basement level wall system.

- **Basic Installation**

Measure from the edge of your concrete footing to the point where the outside face of your wall will be. Drive a nail into the concrete here.

Measure out from that nail to where the other face of your wall will be and place another nail. Plan out how much 3/4-inch plywood you will need to form each side of the wall. You want your wood to be as tall as your planned wall but to form the width (the length) of the wall using at least 4-foot sections. Cut your plywood accordingly. Stand your plywood up so it is butted against the 2-by-4 you nailed down in the space between the end of the 2-by-4 and the string. Use a level against the inside face of the plywood to make sure your form is straight up and down. Once you have it in that position, brace the wall into place by running 2-by-4s at a diagonal from the outside of the form face to the footing. Coat the interior of your form with concrete form oil, so the plywood will not stick to your concrete, and you are ready to pour your wall.

- **Related Terms**

1. Footing; Enlargement of concrete poured at base of the foundation wall, pier, or column that supports the structure while distributing the weight to the soil. (Modern Carpentry, 11th edition)
2. Cement; A powder of alumina, silica, lime, iron oxide, and magnesium oxide burned together in a kiln and finely pulverized and used as an ingredient of mortar and concrete; also : any mixture used for a similar purpose. (Modern Carpentry, 11th edition)



Concrete Wall: June 1, 2013 SS Builders

http://www.ehow.com/how_2212394_pour-concrete-wall.html#ixzz2WQ3p4ruI

RUNNING BOND

- **Definition** (Modern Carpentry, 11th edition)

Stone, Brick, Hollow/Concrete tile or similar material bonded together in an offset pattern as to appear like the edge of the bricks of one level match the center of the lower level of bricks.

- **My Definition**

A masonry pattern for brick to make them offset on centers.

- **Location**

Brick are placed in pattern on the finished face of houses, fences, patios, floors, walkways and any place where brick will be laid. They are set in this pattern to effect the structure of brick system.

- **Basic Installation**

Install bricks starting at one corner and work across and up the area in the running bond pattern. Lay bricks with gaps if you want an antique look with wide seams. Cut bricks with a masonry saw if any half-blocks are needed to make a pattern, such as a running bond where joints overlap in the middle of a brick. Test the level of the project as you work and again when installation is complete. Finish the project by sweeping sand over the bricks and into the seams; use polymeric sand, which has a bonding agent that will seal joints once dampened. It may take several days of sweeping to get all joints firmly filled.

http://www.ehow.com/how_6626243_install-tile-running-bond-pattern.html



Running Bond: June 1, 2013 SS Builders

- **Related Terms**

1. Trowel; Any of various hand tools used to apply, spread, shape, or smooth loose or plastic material

(www.merriam-webster.com)

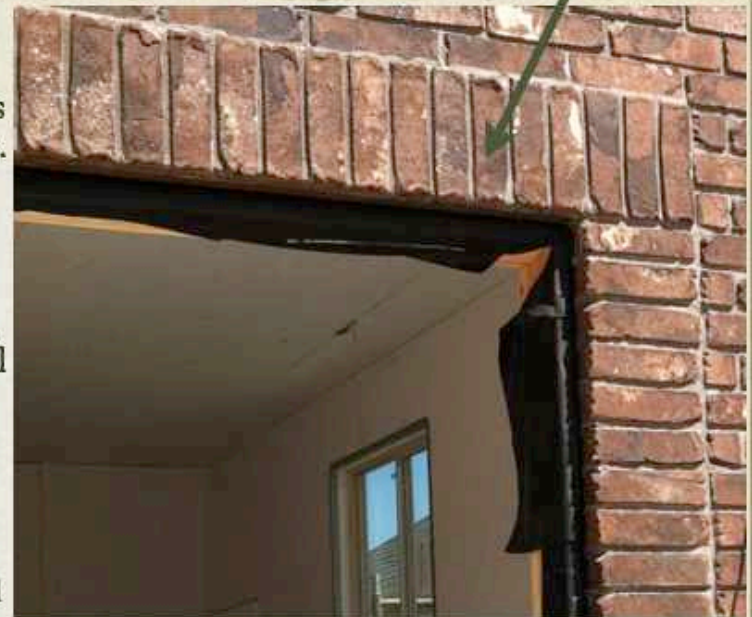
2. Brick; A handy-sized unit of building or paving material typically being rectangular and about $2\frac{1}{4} \times 3\frac{3}{4} \times 8$ inches ($57 \times 95 \times 203$ millimeters) and of moist clay hardened by heat

(www.merriam-webster.com)

STACKED BOND

- **Definition** (Modern Carpentry, 11th edition)
Stone, Brick, Hollow/Concrete tile or similar material bonded together in an straight pattern where the long sides are horizontal and shot sides vertical as to appear like cells.
- **My Definition**
A masonry pattern for brick to make them parallel on with another and all the seams looking alike.
- **Location**
Brick are placed in this pattern on the finished face of houses, fences, patios, floors, walkways and any place where brick will be laid. They are set in this pattern to effect the structure of brick system.
- **Basic Installation**
Install bricks starting at one corner and work across and up the area in the stacked pattern. Lay bricks with gaps if you want an antique look with wide seams; Cut bricks with a masonry saw if any half-blocks are needed to make a stacked pattern. Test the level of the project as you work and again when installation is complete.

www.ehow.com/how_8361791_pave-design-bricks.html#ixzz2WQFp5xbf



Stacked Bond: June 1, 2013 SS Builders

- **Related Terms**
 1. Trowel; Any of various hand tools used to apply, spread, shape, or smooth loose or plastic material
(www.merriam-webster.com)
 2. Brick; A handy-sized unit of building or paving material typically being rectangular and about $2\frac{1}{4} \times 3\frac{3}{4} \times 8$ inches ($57 \times 95 \times 203$ millimeters) and of moist clay hardened by heat
(www.merriam-webster.com)

LUMBAR GRADE MARK

- **Definition** (Modern Carpentry, 11th edition)
A mark by the APA giving a lettering rating for face quality and a name indicating performance ratings.
- **My Definition**
A mark on any type of wood saying what it is intended to be used for.
- **Location**
It is stamped on each piece of plywood
- **Basic Installation**
Is a mark already stamped by the lumbar manufacturer. All that needs to be know about the mark is that different number indicate different uses, For example the PRP-108 is primarily for shear walls and panelized roofing while the Ps-2-92 is for single flooring.



Lumbar Grade Mark: June 1, 2013 SS Builders

- **Related Terms**
 1. Stud; One of a series of vertical structural members in walls and partitions.
(Modern Carpentry, 11th edition)
 2. Lumbar; Timber logs especially dressed for use of various structural materials prepared in mill.
(www.merriam-webster.com)

I JOIST

- **Definition** (Modern Carpentry, 11th edition)

A joist made of a single, thin vertical web connecting two horizontal flanges

- **My Definition**

A type of joist used that has plywood vertically in between two small members.

- **Location**

Used primarily in floor joisting and where

- **Basic Installation**

Measure the distance from the edge of the foundation to the center support beam. Subtract the width of the rim board from this measurement. Cut the joist along this marking position one end of the joist on the foundation wall, and have someone hold the other end against the wood support beam in the center of the building. Align the other end of the joist on the foundation wall, in the position required by the building's blueprints. Place the rim board on the end of the joist, so they are perpendicular to one another and perfectly flush. Hammer two nails through the rim board and into the top lumber of the wood joist. Hammer two nails in a similar fashion into the bottom lumber of the joist. Hammer two nails at a 45-degree angle through the rim board and into the board below the joist. http://www.ehow.com/how_12064521_install-jager-ijoists.html#ixzz2WUXbxVLz

- **Related Terms**

1. Stud; One of a series of vertical structural members in walls and partitions.

(Modern Carpentry, 11th edition)

2. Lumbar; Timber logs especially dressed for use of various structural materials prepared in mill.

(www.merriam-webster.com)



I Joist: June 1, 2013 SS Builders

WOOD BEAM

- **Definition** (Modern Carpentry, 11th edition)

Enlargement of concrete poured at base of the foundation wall, A horizontal structural wood member (usually glued or nailed together) used between posts, columns or walls to support other beams or joists. Also known as girders.

- **My Definition**

The medium by which you can support across a building on any floor from one structure bearing wall to another.

- **Location**

Usually running the span of the house or in areas where added strength is needed for a floor above or a roof.

- **Basic Installation**

Cut the Beam or beam members into the desired lengths, if not prefabricated then you will have to glue or bolt them together yourself. Measure the width of the inside of the beam. Use this measurement to cut anchor blocks. If the width of the inside of the beam is 6 inches, for example, cut blocks that are 3 by 6 by 18 inches in shape and size. The amount of blocks you need will depend on the length you will lay them. Pre-drill holes in the anchor blocks. This ensures the blocks do not split during installation. Lift the beam with the help of an assistant into place over the anchor blocks. Hammer 2.5-inch finishing nails into the blocks; two nails per side on each anchor block. www.ehow.com/how_7867473_do-install-larger-ceiling-beam.html#ixzz2WQRH8Le8

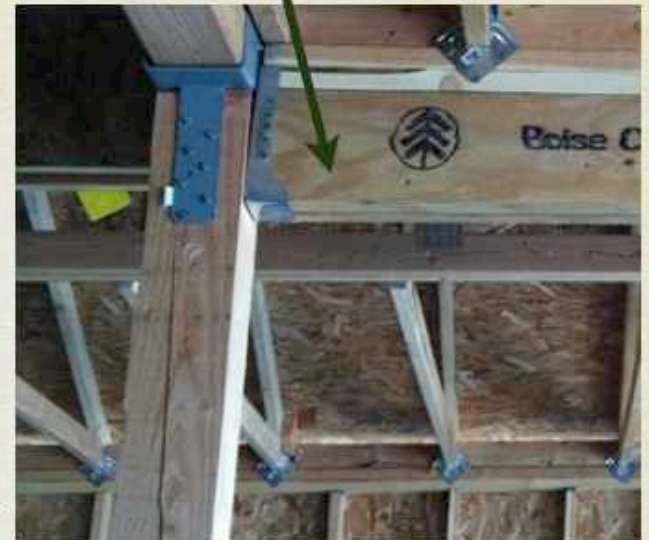
- **Related Terms**

1. Stud; One of a series of vertical structural members in walls and partitions.

(Modern Carpentry, 11th edition)

2. Lumbar; Timber logs especially dressed for use of various structural materials prepared in mill.

(www.merriam-webster.com)



Wood Beam: June 1, 2013 SS Builders

STUD

- **Definition** (Modern Carpentry, 11th edition)

One of a series of vertical structural members in walls and partitions.

- **My Definition**

A singular (most often wooden) 2x4 in a wall installed for structural purposes.

- **Location**

On the inside of a framed wall or partition.

- **Basic Installation**

Measure your walls. Determine how much lumber you need. Purchase the lumber and supplies. Place a length of pressure-treated 2-by-4 inch lumber along the wall and floor seam. Secure the 2-by-4 inch lumber first with a bead of liquid nail glue. Be sure it's the kind that adheres to both wood and concrete. Drill pilot holes in the wooden base plate 16 inches apart. Use a masonry bit if you're drilling into concrete. Nail 3-inch fluted nails into the pilot holes with a sledgehammer. Begin installing the vertical studs mark where the first piece of wood goes. Make sure it's straight. Put a bead of liquid nail glue on the wall, and then attach the wood. Drill the pilot holes. Pound the fluted nails in with a sledgehammer. Continue to install the vertical studs. Make sure the center of each stud is 16 inches apart from the one next to it. Run any electrical wiring that you plan to do at this time. Also, if you need to run any water lines or anything else through the walls, now is the time to install them. Put roll insulation between each stud if you plan to insulate the room. Or, you can use sheet-type insulation and nail it to the studs.

www.ehow.com/how_2123026_install-stud-wall.html#ixzz2WQUuf2Xg

- **Related Terms**

1. I-joist; A joist made of a single, thin vertical web connecting two horizontal flanges

(Modern Carpentry, 11th edition)

2. Lumbar; Timber logs especially dressed for use of various structural materials prepared in mill.

(www.merriam-webster.com)



Stud: June 1, 2013 SS Builders

CROWN MOLDING

- **Definition** (Modern Carpentry, 11th edition)

A relatively narrow strip of wood, used to accent and emphasize the ornamentation of a structure and conceal angle joints.

- **My Definition**

A beautiful wooden strip nailed at the finish of a wall system.

- **Location**

Usually at the angle joint where the finished ceiling meets the wall.

- **Basic Installation**

Determine the location of the joists. Drill pilot holes to keep the molding from splitting. Attach the molding with only a few nails. (Use 6d or 8d finish nails for this, depending on the thickness of the molding). Take a good look at the positioning before completing the nailing. Cut the 2-by-2 to length then screw it to the wall so that it's in the corner where the ceiling and wall meet. The 2-by-2 provides a solid surface sitting at an angle, to which you can nail the molding. Countersink all nails using a nail set. Use wood putty to fill all visible nail holes help cover any small gaps at the joints to give things a more seamless appearance. Wait for the putty to dry and sand it smooth with fine sand paper.

http://www.ehow.com/how_15090_install-crown-molding.html#ixzz2WXISb5Rd

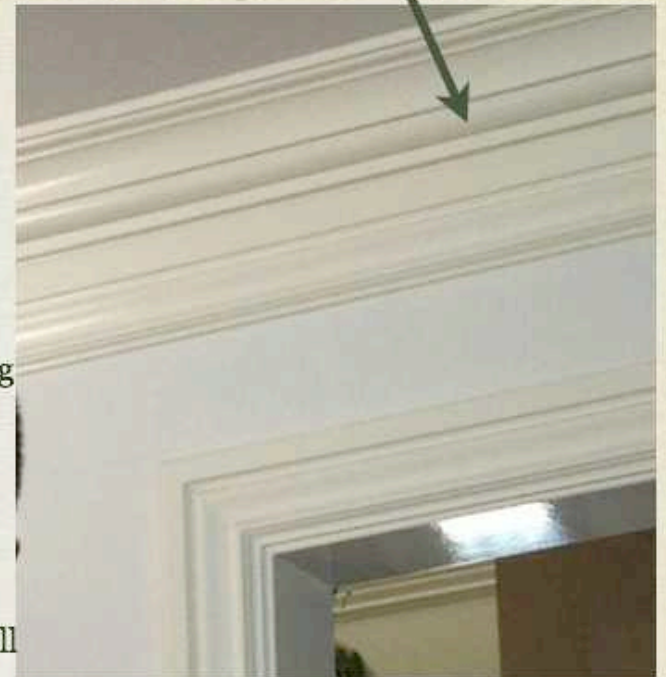
- **Related Terms**

1. Finish sander; Tool used for final sanding where only a small amount of material needs to be removed.

(Modern Carpentry, 11th edition)

2. Nail; A slender usually pointed and headed fastener designed to be pounded in

(www.merriam-webster.com)



Crown Molding: June 15, 2013 Easton House

CABINETS

- **Definition** (Modern Carpentry, 11th edition)

Case or box-like assembly consisting of shelves , doors, and drawers. Used primarily for storage.

- **My Definition**

A treasure chest nailed to the wall, floor or ceiling.

- **Location**

Found in garages, kitchens, bathrooms, laundry rooms and anywhere you need extra storage that is built into the house.

- **Basic Installation**

Take into account the space for base cabinets, the countertop and the splash. Find the wall studs. Once you have located these with a stud finder, mark their positions above and a minimum of six inches below where the cabinet bottom will be. Straight vertical lines between both sets of marks will define the studs' center. Attach a temporary support rail. Align the rail's top edge with the cabinet's bottom edge and screw a 1 by 3-inch support to the wall. Secure it with 2-inch screws. Attach each single cabinet together by placing them backside up on a flat surface. Flush the cabinet faces to one another. Secure overhead cabinets. Once the cabinets are flush, clamp the even surfaces together and use wood screws to permanently attach. Be sure the screws penetrate the strip otherwise the back is too thin. Transfer the stud locations to the cabinet's inside along the hanging strip. Drill pilot holes and attach the screws. With the cabinet(s) bottom set on top of the ledger strip, attach the cabinet to the wall.

http://www.ehow.com/how_2046013_install-kitchen-cabinets.html#ixzz2WXXUcFZk

- **Related Terms**

1. Finish sander; Tool used for final sanding where only a small amount of material needs to be removed.

(Modern Carpentry, 11th edition)

2. Lumbar; Timber logs especially dressed for use of various structural materials prepared in mill.

(www.merriam-webster.com)



Cabinets: June 16, 2013 My House

ASPHALT COATED FELT

- **Definition** (Modern Carpentry, 11th edition)

A thin Sheet material laid down to provide weather proofing to sheathing and prevents direct contact between shingles and resinous areas in the sheathing.

- **My Definition**

A layer of felt like asphalt rolling put down directly on the sheathing to give a little bit more protection and layering between the sheathing and the shingles.

- **Location**

In between the sheathing and the asphalt shingles

- **Basic Installation**

Begin the installation at the eave edge and roll from rake to rake. Tack the paper down around the center to keep it from blowing or falling off the roof. Cut the paper flush at the rake with a utility knife and adjust it to your chalk line. Make sure you have your 3/8 inch overhang. Once you have it adjusted and laying smooth, nail with roofing nails or staple in place every three or four inches on the lower half of the paper. Repeat the process, moving up the roof until you reach the ridge. Where the paper meets end to end, overlap it by four inches. Overlap by six inches at valleys, ridges and hips.

- **Related Terms**

1. Nail; A slender usually pointed and headed fastener designed to be pounded in.

(www.merriam-webster.com)

2. I-joint; A joint made of a single, thin vertical web connecting two horizontal flange.

(Modern Carpentry, 11th edition)



Asphalt Coated Felt: June 1, 2013 SS Builders

http://www.ehow.com/how_5179273_lay-roofing-felt.html

DRIP EDGE

- **Definition** (Modern Carpentry, 11th edition)

A Metal edging placed along the rake and eaves before installing shingles.

- **My Definition**

a metal sheathing used to protect the wood members from rotting and forming ice sickles

- **Location**

Around the edge of the roof where the rain water will drip off of.

- **Basic Installation**

Begin at one corner of the lower edge of the roof. Place a section of drip edge on the bare roof sheathing with the end of the drip edge even with the outer edge of the sheathing. Leave a 1/4-inch gap between the lower portion of the drip edge and the fascia or roof sheathing. Nail the drip edge in place. Use one roofing nail every 12 to 18 inches. Drive the nails through the upper edge of the flashing about 1/2 inch from the edge.

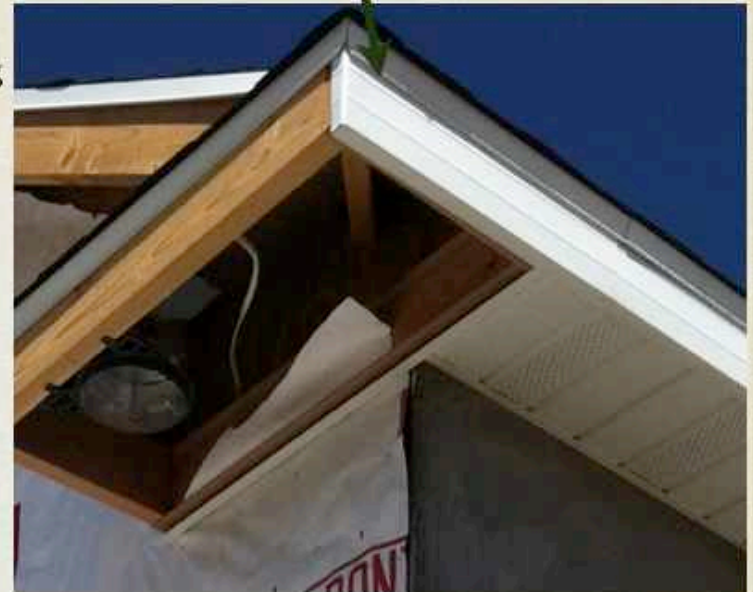
Place the second strip of drip edge on the edge of the roof in the same fashion as the first. Overlap each new section by at least 6 inches over the previously installed section. Place the drip edge on top of the roofing felt with one end even with the corner of the roof. Fasten the drip edge to the roof the same way you did for the lower roof edges.

http://www.ehow.com/how_7868841_install-drip-edge-properly.html#ixzz2WXLrvZpd

- **Related Terms**

1. Asphalt coated felt; A thin Sheet material laid down to provide weather proofing to sheathing and prevents direct contact between shingles and resinous areas in the sheathing. (Modern Carpentry, 11th edition)
2. Nail; A slender usually pointed and headed fastener designed to be pounded in.

(www.merriam-webster.com)



Drip Edge : June 1, 2013 SS Builders

PVC WINDOW

- **Definition** (www.dictionaryofconstruction.com)

A window unit encased in thermoplastic resin derived from the polymerization of vinyl chloride. Plasticizers have been added to give it flexibility

- **My Definition**

A whole window unit made of composite material.

- **Location**

In window Openings

- **Basic Installation**

Make sure the window opening is completely level and square. If your home is made of brick, you will want to be sure it has some wood blocks around the window for you to screw in the new window. If not, you may have to install some shims to keep the window in place. On vinyl siding and vernier, the window should be easy to install because it has wood underneath. Install your new window using screws. Caulk around the window. This will create a weatherproof seal so you won't have to worry about getting any water inside.

http://www.chow.com/how_2319149_install-house-windows.html

- **Related Terms**

1. Nail; A slender usually pointed and headed fastener designed to be pounded in.

(www.merriam-webster.com)

2. Glass; A usually transparent or translucent material consisting typically of a mixture of silicates.

(www.merriam-webster.com)



PVC Window: June 1, 2013 SS Builders

SUSPENDED CEILING

- **Definition** (Modern Carpentry, 11th edition)
Ceiling finishing system composed of metal framework designed to support tile or panels.

- **My Definition**

A faux ceiling used to hide duct and wires.

- **Location**

below framed and structural ceiling.

- **Basic Installation**

Begin installing your wall angles (runners). Install eye hooks for the suspension wires. These hooks are screwed into the existing ceiling or the floor joists above you, if you are installing the drop ceiling in your basement. They should be placed evenly, according the instructions in your ceiling kit. Once you have each hook in place, fasten the suspension wires to the hooks. Each wire should be cut to proper length. Inspect each wire to ensure that it is not bent or kinked. Install the main tees. The main tees are the runners that will suspend from your existing ceiling and help make up your drop ceiling's grid. The tees should run at right angles to the existing joists or ceiling.

http://www.ehow.com/how_2314137_hang-drop-ceiling.html

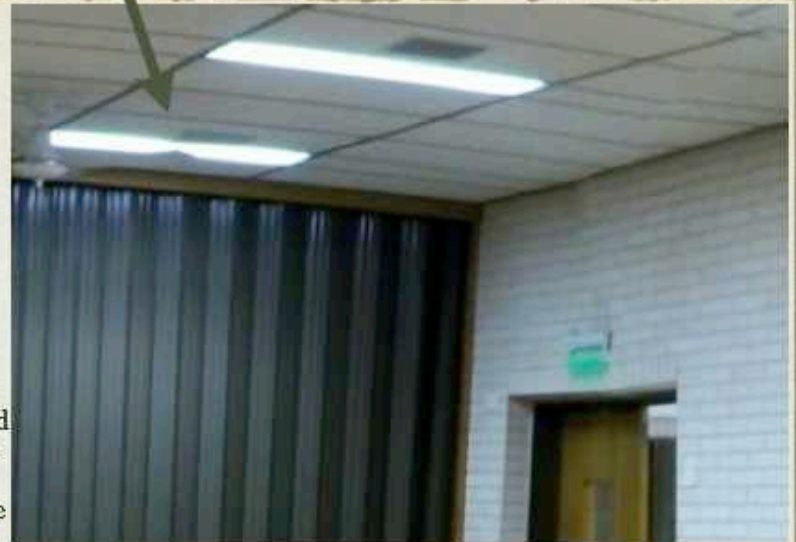
- **Related Terms**

1. Luminaire; A complete lighting unit.

<http://www.merriam-webster.com/dictionary/luminaire>

2. Sheet metal duct work; A pipe, tube, or channel that conveys a substance.

(www.merriam-webster.com)



Suspended Ceiling: June 5, 2013 LDS Church

GYPSUM WALLBOARD

- **Definition** (Modern Carpentry, 11th edition)

Wall covering panels consisting of a gypsum core with facing and backing of paper

- **My Definition**

Drywall, which is a composite board used to build.

- **Location**

I wall systems and used to form basic structure after structural frame is built.

- **Basic Installation**

Mark the location of the wall studs on both the floor and ceiling, so you will be able to find them when you begin installing the sheet rock. Lay a piece of scrap on the floor to raise the drywall off the floor (about 1/2 inch). Starting in a corner, place the drywall onto the scrap and butt it into the corner.

Ensure the other end of the sheet falls onto the center of a wall stud.

Use drywall nails or your drywall gun and drywall screws to fasten the sheet in a couple of places to hold it. Now go back, and starting in the corner, push the drywall sheet tightly against the wall studs and fasten the sheet to all the studs it is covering.

Place screws every. Continue around the perimeter of the room, butting sheets against each other, ensuring the ends are centered on wall studs, until the lower section is finished.

www.ehow.com/how_2001882_install-sheetrock.html

- **Related Terms**

1. Nail; A slender usually pointed and headed fastener designed to be pounded in.

2. Utility Knife; Tool used with very sharp blade, useful for trimming gypsum wallboard.

(www.merriam-webster.com)

(Modern Carpentry, 11th edition)



Gypsum Wallboard: June 1, 2013 SS Builders

CARPET

- **Definition** (www.merriam-webster.com)

A heavy often tufted fabric used as a floor covering.

- **My Definition**

Soft floor cover that adds home like feel to any room.

- **Location**

On floors and stairs in any room desired.

- **Basic Installation**

Nail down fastening strips, starting in the corner. Nail the strips along the edge of the floor about 1/4 inch from the wall with the teeth towards the wall. Do this around the entire room. Nail the metal door edgings across the doorway with the open side pointing inside the room and with the teeth pointing out of the room. Unroll the padding across the room you are carpeting, with the waffle side up. Cut this with a carpet cutting tool; overlap the fastening strips 2 inches along the entire wall. Kneel on the floor in the corner and hold the handle of the kicker with your right hand while using the left hand to hold yourself upright on the floor. Put as much of your weight as possible on the right arm and shove the left knee into the kicker to push the carpet and stretch it into place. Hook the carpet into the teeth of the fastening strips. Do this around the entire room.

www.ehow.com/how_2000998_install-carpet.html#ixzz2WjgSFHpU



Carpet : June 16, 2013 My House

- **Related Terms**

1. Nail; A slender usually pointed and headed fastener designed to be pounded in.

(www.merriam-webster.com)

2. Staple; Usually U-shaped fastener used as a metal loop both ends of which are driven into a surface to hold the hook, hasp, or bolt of a lock, secure an object.

(www.merriam-webster.com)

DIRECT VENT GAS FIREPLACE

- **Definition** <http://www.dictionaryofconstruction.com>

A flex duct opening made in a chimney to exhaust a gas fire.

- **My Definition**

A gas fire that is directly vented.

- **Location**

Any room wanted, usually living room or patio.

- **Basic Installation**

Shut off the gas in the house at the main valve, typically in the basement or a ground-floor utility room. Push up on the lever in your fireplace that opens the damper door to lock the damper in the open position. Open the glass or metal doors on the front of the fireplace to access the lock bolts inside. Turn the two bolts at the top of the gas appliance and the two on the lower left and right sides clockwise with pliers until tight to lock the appliance on the masonry of your permanent fireplace. Close the glass or metal doors. Connect the gas line in the room to the nozzle on the vented or ventless fireplace and twist the connector clockwise by hand. Finish tightening with a 1/2 turn using pliers. Open the main gas valve after confirming the burner controls on the gas fireplace are in the "Off" position. Spray soapy foam on the line connection to your fireplace. Look for popping bubbles. (www.ehow.com/how_8736189_install-gas-burning-fireplaces.html#ixzz2WjbMvxij)

- **Related Terms**

1. Fire Alarm; An alarm that activates automatically when it detects smoke called also smoke alarm

(www.merriam-webster.com)

2. Sheet metal duct work; A pipe, tube, or channel that conveys a substance.

(www.merriam-webster.com)



Direct Vent Fireplace : June 1, 2013 SS Builders

FIRE ALARM

- **Definition** (www.merriam-webster.com)

An alarm that activates automatically when it detects smoke called also smoke alarm

- **My Definition**

A device that tells you there is a fire in the building.

- **Location**

In areas where a potential fire could occur.

- **Basic Installation**

Detectors should be mounted only inside bedrooms, outside of bedrooms and in hallways leading to bedrooms. Be sure when attaching to the wall, place it 4-12 inches from the ceiling and in turn, mount ceiling detectors 4 inches from the wall. Smoke rises, so if you have a odd-shaped ceiling, opt for the highest point on the ceiling to place the detector. Avoid mounting smoke detectors in kitchens, dining rooms or living rooms. Smoke and steam from cooking, fireplaces, candles and so on can cause false alarms. Basements and garages should be avoided also. Water heaters, fumes from solvents, paint or gasoline, and dust from forced air heaters can set off alarms. Follow the directions on the package for mounting the smoke detector once you've chosen the area for the device. You'll most likely need a drill and a screwdriver.

http://www.ehow.com/how_14119_install-smoke-detector.html#ixzz2WjZTGQqd

- **Related Terms**

1. Direct Vented Gas Fireplace; A flex duct opening made in a chimney to exhaust a gas fire.

<http://www.dictionaryofconstruction.com>

2. Circuit Breaker; A switch that automatically interrupts the current of an overloaded electric circuit.

(www.merriam-webster.com)



Fire Alarm: June 16, 2013 My House

90° ELBOW

- **Definition** (www.merriam-webster.com)

An angular pipe fitting

- **My Definition**

A 90 degree turn coupler for pipe.

- **Location**

at a 90 degree turn for pipe, any style.

- **Basic Installation**

Work one end of the cut pieces of pipe into the 90-degree elbow in the water pipe. The short side should face toward the inside bend of the elbow and the long side should face toward the outside bend of the elbow. Slide the other piece of pipe insulation around the elbow in the same manner. Notice how the two 45-degree angles meet up exactly and completely seal the 90-degree water pipe elbow. Trim the other ends of the insulation as needed to meet up with the other insulation on the water pipe.

http://www.ehow.com/how_7244816_insulate-90_degree-water-pipes.html#ixzz2WjQcGbxN



90° Elbow: June 16, 2013 My House

- **Related Terms**

1. Tee; A T-shaped fitting to connect three lengths of pipe in the same plane with one length at right angles to the other two. (www.merriam-webster.com)
2. A reservoir in a hydronic heating system that accommodates increased water volume caused by expansion due to heating. (www.merriam-webster.com)

TEE

- **Definition** (www.dictionaryofconstruction.com)

A T-shaped fitting to connect three lengths of pipe in the same plane with one length at right angles to the other two.

- **My Definition**

A fitting which connects two pipes running the same direction.

- **Location**

On a water pipe any where and from any size, and any material.

- **Basic Installation**

Mark the existing copper pipeline at the point where the Tee fitting will be attached. Make a second mark 3/4-inch along the pipe from the first mark. Place the copper pipe in the jaws of a tubing cutter against the two small rollers on one of the cutter's jaws. Tighten the small circular blade on the cutter's other jaw against the pipe at one of the marks. Rotate the cutter 360 degrees around the pipe, then re-tighten the blade. Rotate again. Repeat this process until the pipe is cut through. Follow the same procedure to cut though the pipe at the second mark. Remove the 3/4-inch pipe section. Measure and cut a new copper pipe section to the required length. Sand around the outside ends of the existing cut pipes to a width of 3/4-inch, using emery cloth. Sand one outside end of the new pipe section in the same way, and sand the three inside ends of the Tee fitting. (www.chow.com/how_8220364_add-tfitting-copper-pipe.html#ixzz2WjWwfKd8)

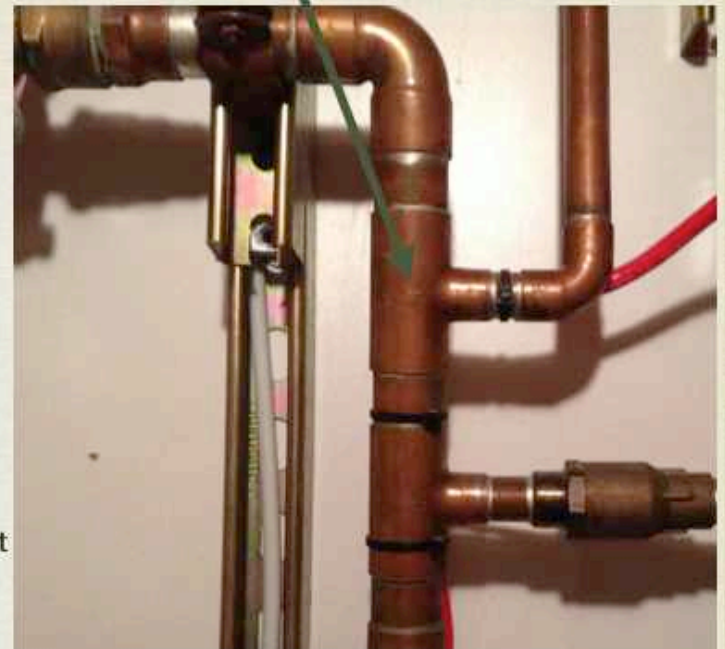
- **Related Terms**

1. 90° Elbow; An angular pipe fitting

(www.merriam-webster.com)

2. Water heater; An apparatus for heating and usually storing hot water.

(www.merriam-webster.com)



Tee: June 16, 2013 My House

EXPANSION TANK

- **Definition** (Modern Carpentry, 11th edition)

A reservoir in a hydronic heating system that accommodates increased water volume caused by expansion due to heating.

- **My Definition**

A tank that helps relieve pressure in a water hydronic system.

- **Location**

Usually installed on the supply side of the hydronic system.

- **Basic Installation**

Locate the cold-water supply line, and determine which part of it runs horizontal (side-by-side) to the water heater. This is where you will want your expansion tank to be located, and where you will link it to the water heater itself. Also, the fumes can get into the house, and may cause illness or death to family members and pets. TURN THE WATER SUPPLY TO THE WATER HEATER OFF. Then, hang the expansion tank ABOVE the cold water supply line, where it will be accessible to the horizontal part as well as the water heater. Make sure your expansion tank is securely fastened to the wall or other support from which it is hanging. It will have some weight to it, and could cause damage to the water heater or surrounding areas if it were to fall. The manufacturer's instructions for the expansion tank can tell you

how to do this. Install the tee fitting to the cold water supply line. Determine which end of the threaded connector on the expansion tank fits the tee fitting. Wrap the Teflon tape around the proper end; fit the tank connector to the tee fitting. Tighten the fitting securely, using a pipe wrench. www.ehow.com/how_4442802_install-expansion-tank-hot-water.html#ixzz2WjP4XoIf

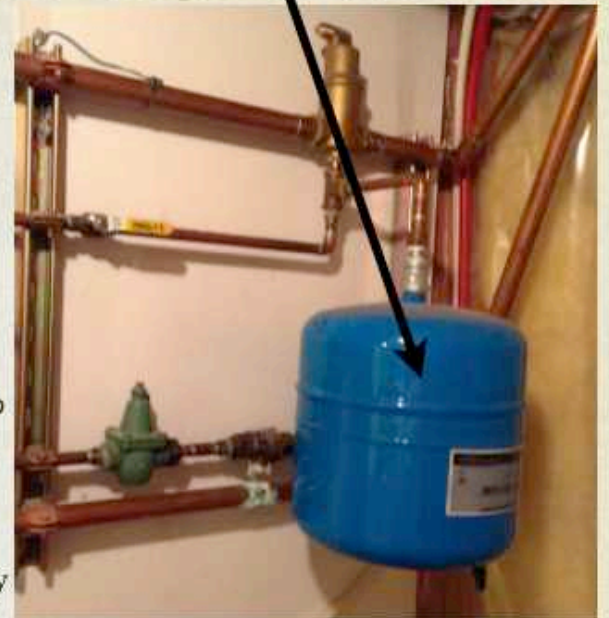
- **Related Terms**

1. Water heater; An apparatus for heating and usually storing hot water.

(www.merriam-webster.com)

2. 90° Elbow; An angular pipe fitting

(www.merriam-webster.com)



Expansion Tank: June 16, 2013 My House

TOILET/WATER CLOSET

- **Definition** (www.merriam-webster.com)

A fixture that consists usually of a water-flushed bowl and seat and is used for defecation and urination

- **My Definition**

A plumbing fixture that has a built in trap to seal in waste odors and disposes of them.

- **Location**

Bathroom, Restroom.

- **Basic Installation**

Pull the toilet tank off the toilet bowl and carefully set it upside down on a towel or carpeting. Locate the spud nut in the center of the tank that holds the flush valve in the tank. Remove the nut with adjustable pliers and remove the original flush valve from the tank. Insert the tail of the universal flush valve into the opening left when you removed the original flush valve. Install the spud nut onto the flush-valve threaded tail piece. Tighten the spud nut with the adjustable pliers and push the spud washer provided with the Plump Pak over the spud nut. Lift the toilet tank onto the toilet bowl. Install the tank bolts, securing them with the nuts you removed previously. Insert the threaded tail of the replacement fill valve into the hole left in the tank when you removed the original fill valve. Insert the fill valve nut onto the threads of the fill valve. Tighten the nut to secure it to the tank. Attach the supply line to the fill valve nut beneath the toilet tank. Turn the valve handle on the water supply to the right to fill the toilet tank.

http://www.chow.com/video_4426113_install-toilet.html#ixzz2WjSBUUpJ



Water Closet: June 16, 2013 My House

- **Related Terms**

1. Tee; A T-shaped fitting to connect three lengths of pipe in the same plane with one length at right angles to the other two. (www.merriam-webster.com)
2. 90° Elbow; An angular pipe fitting. (www.merriam-webster.com)

FURNACE

- **Definition** (www.merriam-webster.com)

An enclosed structure in which heat is produced

- **My Definition**

A big appliance where heat is produced and sent through duct work.

- **Location**

Usually found in the utility room.

- **Basic Installation**

Shut off the electricity to your old heating unit and disconnect it from the cords. Pull out your electrical cords or make note of the types of connections they have to the furnace. Bring your new heating system to the place where your old furnace sat. Make any alterations necessary if you do not have enough leads coming from the heater to the ducts. Plug the new furnace into a properly set up outlet. Like other high voltage items like stoves and refrigerators, electric furnaces require special wiring to ensure they do not continually blow a fuse in your home while heating up. Test your electric furnace to make sure it is connected properly. If you are not sure whether your electrical system can sustain this strain, consult an electrician before completing this project.

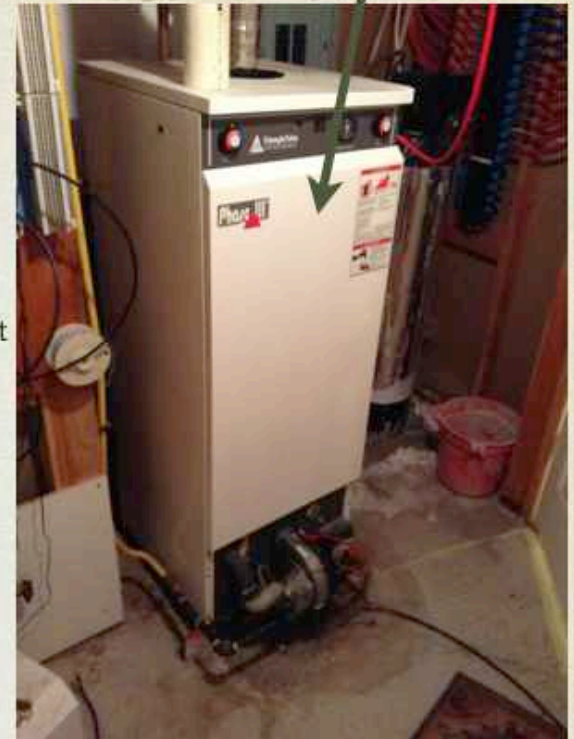
http://www.ehow.com/how_4485697_install-electric-furnace.html#ixzz2WjMfuZ00

- **Related Terms**

1. Sheet metal duct work; A pipe, tube, or channel that conveys a substance.

(www.merriam-webster.com)

2. Thermostat; An automatic device for regulating temperature (as by controlling the supply of gas or electricity to a heating apparatus) (www.merriam-webster.com)



Furnace: June 16, 2013 My House

THERMOSTAT

- **Definition** (www.merriam-webster.com)

An automatic device for regulating temperature (as by controlling the supply of gas or electricity to a heating apparatus)

- **My Definition**

A device that controls the AC (which includes heating and cooling).

- **Location**

On wall in central location in building

- **Basic Installation**

Take the back plate to the thermostat and place it over the hole where the wires are coming out of the wall. Use the torpedo level to ensure that the back plate is level and then use the pencil to mark the wall where the screws will be screwed in. Insert the plastic anchors that came with the thermostat and make sure that they are flush with the wall. Fish the thermostat wires through the hole on the back plate and screw the plate into the anchors. Double check that the back plate is level using the torpedo level. Thermostat wire is so thin and brittle, it makes sense to use the wire strippers to cut the ends off of each wire and strip a new section of wire. Strip about 3/4 inches of insulation from the end of each wire. R for the red wire, G for the green wire, Y for the yellow wire, and so on. However, that is not always the case. Place the "U" shape of the wire under the proper screw and tighten it down. Be careful not to over tighten, as the wire can break easily. Do this for each wire. Snap the thermostat's cover in place and insert the necessary battery. Turn the power to the unit back on.

www.ehow.com/how_2167659_install-digital-programmable-thermostat.html#ixzz2WjGQ5OWE

- **Related Terms**

1. Water Heater; An apparatus for heating and usually storing hot water (as for domestic use)

(www.merriam-webster.com)

2. Furnace; An enclosed structure in which heat is produced

(www.merriam-webster.com)



Thermostat: June 16, 2013 My House

SHEET METAL DUCTWORK

- **Definition** (www.merriam-webster.com)

A pipe, tube, or channel that conveys a substance (air ducts to provide ventilation).

- **My Definition**

the medium by which the conditioned air reaches its desired location.

- **Location**

In walls, ceilings, floors and crawl spaces.

- **Basic Installation**

Attach the first piece of duct work to the forced air unit or the trunk of an existing duct. Use sheet metal screws and duct tape to assure a tight seal. Hang the remaining duct work according to your schematic. Make sure to keep a minimum of 1-inch clearance from any flammable materials. If there are structures you cannot avoid, you must cut and collar them, and be sure to seal the collar with duct tape. Connect each piece of duct to the next with a slip connector. This coupler can be connected with sheet metal screws or duct tape. The tape creates an air tight seal and should be used whether or not screws are. Install duct hangers every three to five feet.

Screw these directly into wooden supports. Seal every connection with aluminum foil tape or silicone caulking. This is extremely important because leaky air ducts cause inefficiency which can cause higher heating and cooling bills. Add insulation around the duct work in areas that have large temperature deviations like the attic and basement.

- **Related Terms**

1. Furnace; An enclosed structure in which heat is produced.

(www.merriam-webster.com)

2. Thermostat; An automatic device for regulating temperature (as by controlling the supply of gas or electricity to a heating apparatus) (www.merriam-webster.com)



Sheet Metal Ductwork: June 1, 2013 SS Builders

www.chow.com/how_12024229_install-sheet-metal-ducts.html#ixzz2WjIYWsaq

DUPLEX OUTLET

- **Definition** (www.dictionaryofconstruction.com)

Two electrical receptacles housed in the same outlet box.

- **My Definition**

A standard outlet with two plugs.

- **Location**

Usually installed in walls close to where use would be advantageous.

- **Basic Installation**

Turn off the power to the circuit at the breaker box. If you're not completely certain about which circuit supplies power to the circuit, turn off the main power switch. Strip the wires that will be connected to the outlet. If your outlet is on the end of a circuit, you'll have one cable leading to it. If the outlet is part of a larger circuit, you'll have one cable leading to it, and another leading to the next outlet. Connect the black wire going to the next outlet to the other screw. On the other side of the outlet, connect the white wire to the silver screw, and the white wire leading to the next outlet to the other silver screw. Mount the outlet into the gang box using the screw holes on the tabs at the top of the outlet. Cover with an outlet plate.

www.ehow.com/how_4798339_wire-duplex-outlet.html#ixzz2WjDWzeH5



Duplex Outlet : June 5, 2013 LDS Church

- **Related Terms**

1. Circuit Breaker; A switch that automatically interrupts the current of an overloaded electric circuit.

(www.merriam-webster.com)

2. Luminaire; A complete lighting unit.

<http://www.merriam-webster.com/dictionary/luminaire>

LUMINAIRE

- **Definition** <http://www.merriam-webster.com/dictionary/luminaire>

A complete lighting unit.

- **My Definition**

A means by which lightbulbs are fastened and held in place.

- **Location**

Ceiling, wall, in fixtures, in appliances, outdoors, lamps etc...

- **Basic Installation**

Hold new fixture up to mounting plate to check clearance and make sure mounting bolts are long enough. If new fixture base plate is a different shape, you may have to adjust the cross bar or install a different length threaded nipple. Twist three wires of new fixture onto the corresponding house wires, turning clockwise and screw on wire nuts clockwise. Push wires up behind mounting plate. Push the base plate of new light fixture onto the mounting bolts and thread on nuts. Tighten the nuts a few turns, then screw in one light bulb and test wiring by turning on circuit breaker.

Turn off circuit breaker again and tighten mounting bolts and screw in all light bulbs. For flush-mounted fixture, mount shade or enclosure and tighten outside nuts. Turn circuit breaker back on, and you're ready to go.

www.chow.com/how_4840992_install-fluorescent-light-bulbs.html#ixzz2WdHQwugo

- **Related Terms**

1. **Circuit Breaker**; A switch that automatically interrupts the current of an overloaded electric circuit.

(www.merriam-webster.com)

2. **Duplex Outlet**; Two electrical receptacles housed in the same outlet box.

(www.dictionaryofconstruction.com)



Luminaire: June 16, 2013 My House

CIRCUIT BREAKER

- **Definition** (www.merriam-webster.com)

A switch that automatically interrupts the current of an overloaded electric circuit.

- **My Definition**

A device that cuts the flow of electricity to a group of systems

- **Location**

Usually found in the utility room.

- **Basic Installation**

Shut off the main power switch, cutting electricity to your home. Shut off the circuit breaker you intend to replace. Remove the metal panel surrounding the row of circuit breakers with a screwdriver and set it aside. Pop out the old circuit breaker, and unscrew the wires from their terminals. Note which wire goes where. Check the new circuit breaker and make sure it is in the "off" position. Match each wire up to the proper terminal in the new breaker. Each wire should be attached to the same terminal as it was in the old breaker. Fit the wires into place, and tighten the screws to hold them. Snap the new circuit breaker into position.

Turn the power on, then switch the breaker to the "on" position. Replace the metal frame and screw it into place, then close the breaker box.

www.ehow.com/how_4812242_install-circuit-breaker.html#ixzz2Wj7Zo2Rf

- **Related Terms**

1. Luminaire; A complete lighting unit.

<http://www.merriam-webster.com/dictionary/luminaire>

2. Duplex Outlet; Two electrical receptacles housed in the same outlet box.

(www.dictionaryofconstruction.com)



Circuit Breaker: June 1, 2013 SS Builders

CONCRETE PAVING

- **Definition** (Modern Carpentry, 11th edition)

A concrete covered surface of a public thoroughfare, the material with which something is laid flattened, hardened on the surface

- **My Definition**

A method of laying concrete.

- **Location**

A driveway, patio, side walk basketball court, or anywhere a desired concrete slab is desired.

- **Basic Installation**

Set forms running parallel and at a height that is level with existing walks or at a level very close to that of the ground surface level for easy yard maintenance. Prep the walk area carefully by removing all sod and loose dirt to the depth of the walk plus approximately two inches for a sub-base of sand or crushed rock. Make sure that any loose or spring-y soil is carefully compacted to avoid sinking, tilting or excess cracking later on in the sidewalk's lifespan. Use a cross slope of one-eighth of an inch per foot in width away from any nearby structures to help with drainage. Use asphalt-impregnated joint material at points where the walk comes in contact with a structure or another large body of concrete. Be sure to cut control joints every 4 to 5 feet along the length of the walk. These run across the surface and are made with a groover.



Concrete Paving: June 1, 2013 SS Builders

- **Related Terms**

1. Trowel; Any of various hand tools used to apply, spread, shape, or smooth loose or plastic material

(Modern Carpentry, 11th edition)

2. Cement; A powder of alumina, silica, lime, iron oxide, and magnesium oxide burned together in a kiln and finely pulverized and used as an ingredient of mortar and concrete; also : any mixture used for a similar purpose. (Modern Carpentry, 11th edition)

www.ehow.com/how_16409_lay-concrete-sidewalk.html#ixzz2WQIs3EwG