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Education Courses & Training

Lectures & Webinars

Reporting System

Educational Materials

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Any information contained in your inspection reports must be verified with your local code requirements. Building codes or local standards vary widely across North America.

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Report Writing Tips

“Writing is about reading – reading is about UNDERSTANDING”.

Never

- Use a complex word where a simple one will do.
- Explain how to fix a problem (unless you’re an expert in that field).
- Say anything that you can’t prove . . . common faults are:
 - *“The septic system appears in good condition.”*
 - *“There are no active cracks.”*
 - *“These shingles were not professionally installed.”*
- Quote prices unless you’re certain you’re right.
- Discuss house prices.
- Give an opinion as to who should pay for repairs.
- Use technical language (unless there’s no choice).

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HOME INSPECTIONS

Always

- Comply with the Professional Standards of Practice.
- Advise immediate repair of electrical or safety problems.
- Ensure handwriting is legible.
- Remember your audience – most are non-technical.
- Write as you would speak . . .and try to avoid ambiguous statements like:
 - *“The walls are rotted.”*
 - *“I touched the pipe with my finger which sprayed water everywhere.”*
 - *“You need a new roof.” (When you really mean – roof shingles)*

Avoid

Some meaningless phrases, often seen in reports:

- *“This home is in above average condition.”*
- *“The grade needs attention.”*

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Reporting

1. Describe the component and its installation.
2. Identify the function it performs.
3. Identify the deficiency and how it affects the function.
4. State how condition will affect client, owner or occupant.
5. Report so the client understands and acts on the recommendation.
6. Ensure your client understands the scope and limitations of the inspection before you start.

Scope of Work

Follow the standards of practice as a minimum - is what you can reasonably be expected to achieve.

Example: The scope of a roof examination would be to describe the materials. Report how you did it – (ladder, walking on, roof edge, etc.) Report what you saw and report signs of deterioration or leaking.

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Limitations show what you can't do, and why.

The limitation might be: *"It was covered in three feet of snow and I couldn't see a thing."*

Reports are for the benefit of your client alone.

Never send copies to anyone else unless specifically requested by the client.

Always make a note on all copies: *"This copy was sent to (person)..... at the request of"*

STRUCTURE

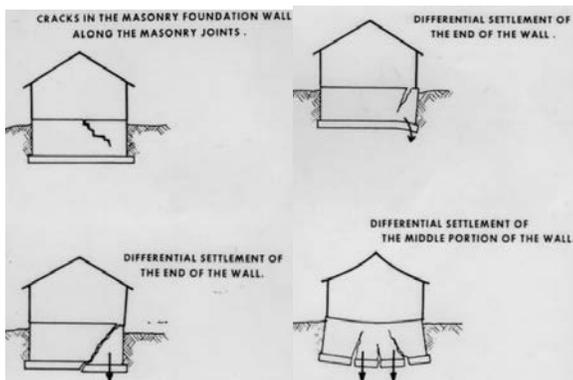
Concrete Cracks

- Concrete shrinks as it dries; often causing cracks are usually vertical or diagonal.
- Parging has a different co-efficient of expansion and contraction than the concrete foundation wall it covers. Not all cracks in parging extend through the concrete.

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Concrete Cracks....cont'd

- **Settlement cracks** can be identified as they are usually bigger at one end of the crack than the other, and are almost always vertical or diagonal. There will often be a related crack in an opposite wall. Often found at the corners of basement windows.
- **Pressure cracks** are often horizontal. They are caused by exterior soil/water pressures, and are almost always a problem.



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Masonry Blocks

- Movement in block walls, especially where the blocks are displaced, will often mean re-building.
- Long walls should have a perpendicular wall to help prevent lateral movement. A good rule of thumb is: you need a perpendicular wall every 20 x the thickness of the block. So a 10 inch block wall will need one every 10 x 20 = 200 inches - about 16 feet.
- Perpendicular walls must be tied in to the walls they support.

Brick Veneer

- Cracks in brick veneers often follow the coursing, like steps.
- Lateral movement in brick veneers is generally a significant problem.
- Repaired cracks (where there is no further movement) should be monitored, but are usually OK.
- Look for bowing, bulging or leaning in the wall.
- Sagging lintels over masonry openings.
- Spalling or mortar deterioration.

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General

- Most cracks and movement are attributable to underlying problems such as water infiltration (often due to poor grading or drainage), poor soil conditions, inadequate footings/frost cover, or poor/inappropriate construction or materials.
- Some conditions are home owner/contractor inflicted, such as: cut joists, re-located tele posts, walls added or removed, placement of water beds/safes/grand pianos, etc.

Framing

Framing Members

- Stiffness is how much it will bend.
- Strength is how much load it can take before it breaks.
- Sag relates to the bending (usually somewhere near the middle) when a load is applied.
- Slope is an as-built non-horizontal factor.
- So a floor might slope because the foundation walls weren't built level, and it might sag because someone put a king-sized water bed on it.

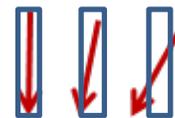
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Check

- Operation of windows and doors and check floors for level.
- Stairs for slope – on treads front to back.
- Whole staircase and floor opening framing.
- Joists for cracks, sag, slope, end supports, joist hangers, notches & cuts.
- Beams for slope, rotation, end support, sags and cuts.
- Posts for vertical, footings, cracks and bending.
- Walls for vertical, bowing, split studs.

Columns

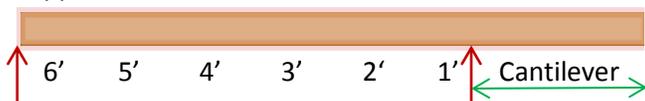
It takes very little angle on a post or column, to make it unstable. Columns must be securely fastened. Look for straightness.



As soon as centre of gravity moves away from centre of column, it becomes unstable. When it moves outside column base – it will fall. Page 10

Cantilevers

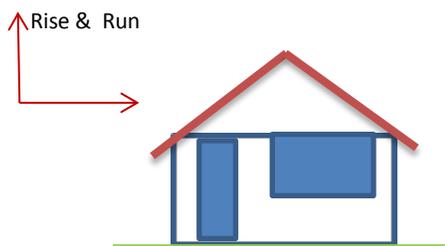
Cantilevers are often over spanned. Code limits them to 24 inches unless engineered. A good rule of thumb is six times the unsupported length must be supported.



Roof, Flashings & Chimneys

Slope is expressed by a ratio - how far it travels up (rise) against how far it goes along (run).

We always use 12 feet as the run so a slope of 5:12 means a 5 foot rise for every 12 feet of run. Anything less than 2:12 is considered to be flat.



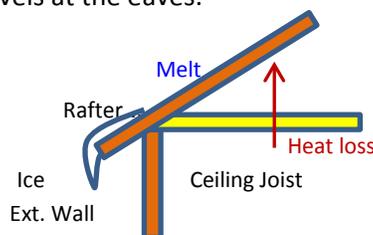
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Coverings

- Asphalt shingles: life expectancies varies 15-20 years
- Metal: 25-50 years (but you may have to do interim maintenance – painting, for instance)
- Wood shakes/shingles: 30-50 years
- Concrete or clay tiles: 50-100 years (but you will need additional structural support in the roof as they are very heavy)

Ice Damming

Caused when poor insulation and/or ventilation in attic exterior wall and eave junction causes snow to melt and run down the roof until it meets the lower, colder levels at the eaves.



Here it freezes and causes an ice dam. Subsequent melting snow hits the dam and builds back up under the shingles. Installing an ice shield or tar paper will help. Increasing ventilation and/or insulation reduces this problem.

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Flashings

- These are the (often) metal strips that seal the joints between two dissimilar materials, or between two sections of the same materials that are on different planes (valleys, step flashings at masonry chimneys, and so on). Regular maintenance required.

Vines and Trees

- Keep vines at least 3 feet from eaves, soffits, fascias and chimney tops. **Do not** allow them to grow on wood siding on any other exterior wood (windows, door, Tudor-style beams, stucco, etc.)
- Keep all trees trimmed away from roof areas. Remember in the fall, pine needles, leaves and small branches will often contribute in blocking gutters and downspouts.
- Large trees can cause serious damage to foundations, footings and slabs. Roots can infiltrate perimeter drainage systems and septic pipes. **Beware** of trees within 75 feet of any septic installation. **Recommend** having tile bed tested for root infiltration.

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Chimneys

- Temperatures in a chimney fire can exceed 1,100°C so flue liners and chimneys **must** be able to withstand those temperatures.
- Older grey metal flues were filled with silica sand. When wet it converts to an acid that eats the metal pipe. Any rust on those pipes is an indication of a possible problem and a potential **fire hazard**.

Check:

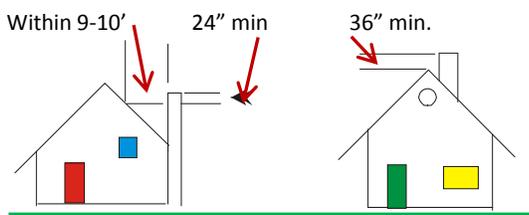
- All chimney flashings – common leakage points.
- Chimney caps for cracks and security.
- Masonry chimneys for spalling (crumbling bricks).
- Chimneys taller than 12 feet above roof – need bracing.
- Interior clay liners for crumbling and disintegration (**fire hazard**).
- Unlined masonry chimneys used for oil furnaces – possible contamination of bricks and/or interior surfaces.
- Unlined masonry chimneys used for wood stoves – homeowners often use poor quality wood – excess tar – contaminates bricks and/or interior surfaces.

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Check – continued....

- Stand back from house – view chimney from several angles – is it vertical? Many aren't and need re-building.

Clearances to roof



- All chimney flues should be cleaned annually, using a licensed chimney sweep.
- Chimneys serving fireplaces cannot serve any other appliance.
- Gas and oil appliances *may be* common vented (furnace and hot water tank into same flue) BUT **must** be same fuel. Some other rules apply – check codes.
- Some wood/oil furnaces *may be* common vented but the wood flue **must** always be at the bottom.
- Direct vent (high-efficiency) units **may not** be common vented.
- Check for clearance from combustibles.

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EXTERIOR

Eavestrough/Downspouts

- Ensure all downspouts discharge at least 6 feet from foundation walls/carport posts/porch footings, etc.



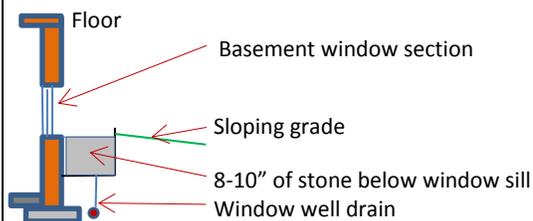
- Above ground downspout extensions are OK, but can be annoying when mowing. They may be a trip hazard too.
- **Do not** discharge downspouts onto lower roof sections – instead, extend the pipe into the lower gutter or provide a separate downspout to the ground.

Grade & Window Wells

- Grading **must** slope away from the building about one inch per foot for at least the first 6 feet. This includes driveways, paths and patios.
- The grade **must** be at least 6 inches below any brick veneer and at least 8 inches below any siding or stucco.
- Required where grade is within 6 inches of the bottom of – or above the level of – any basement window sill
- Rain barrels **must** have an overflow installed that discharges min. 6 feet from foundation, footings etc.

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Grade & Window Wells – continued.....



Trees

- Large trees near buildings can cause damage when roots heave walls and footings. Roots can also infiltrate drainage and septic systems.
- Always report the presence of large trees and point out possible consequences.

Windows & Doors

- It is seldom worth replacing windows unless they are actually falling apart, or, aesthetically they are driving your client nuts!
- In just about any other event, the capital cost of replacement so heavily outweighs any saving made as a result of better efficiency, that a person would have to live there for many years – just to break even.

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Windows & Doors – continued.....

- There may be some advantage at re-sale, but it's generally that the house will sell more quickly – not that it will be worth more.
- Painting and caulking every 4 to 5 years, and lubricating mechanisms regularly, will extend the life of most units.
- **Check** for "security" hardware.
- Egress opening required for basement "sleeping spaces"

Siding

- Aluminum siding can be painted.
- Vinyl siding becomes brittle in the winter and is easily damaged.
- Keep barbecues away from vinyl siding to avoid heat damage.
- Wood siding needs regular attention and will rot if it is below grade.
- Stucco cracks. The metal drip edges rust. Cracks let water and the elements in.
- **Check** for rot in framing or sheathing behind.

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Decks, Steps & Guards

- Handrails and guardrails are required:
 - On all decks higher than 24 inches above the ground
 - On open side of exterior steps with more than 6 risers.
 - On any exterior steps with more than 3 risers.
 - On interior stairs with more than 2 risers
- All guardrails to be min. 36 inches high, and 42 inches high where deck/balcony height exceeds 6 feet – except on risers where minimum is 31 inches.
- Spaces between spindles **must not** allow 4 inch ball to pass through.
- No obstructions to continuous handrails (on stairs) allowed, except where they change direction. (This means you can't put a newel post in the middle of a long handrail.)
- Vertical height of stairs floor to floor **must not** exceed 12 ft.
- Landing width **must** be at least the same as stair width.
- Doors **must** open onto a landing – **not** directly onto stairway.
- Proper support is required for exterior concrete stairs with more than 2 risers and 2 treads.

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HEATING & AIR CONDITIONING

- Heating system **must** be able to maintain 22°C (72F) in all above ground habitable rooms, and 18°C (64F) in basements (15°C (59F) in crawl spaces).
- Cooling system **must** be able to keep habitable rooms at 24°C (75F) or lower.
- There **must** be an adequate heat source in all habitable rooms.
- Heat loss surveys are beyond the scope of inspection.
- There is a KNOWN problem with power venters for oil furnaces: furnaces won't stay lit – poor efficiency – constant service needed, etc.
- Oil tanks rust from the inside out. Run your hand under the tank, away from the filler end. The slightest sheen of oil may mean pin holes in the steel. **Recommend** further immediate investigation.
- **Check** for damage and rust on exterior. Report if only part of tank visible. Exterior tanks have to be tied to wall. Check oil supply lines – protection required over floors and in high traffic areas.
- Both gas and oil furnaces **must** have combustion air supply unless high efficiency.
- **Report** extent of heat exchanger/heat shield NOT visible (75%, 90% etc.)

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HEATING & AIR CONDITIONING

- Life expectancy:
 - Gas furnaces 15-20 years
 - Oil furnaces 17-30 years
 - Heat Pumps 10-15 years
 - Air Conditioning 12-17 years
- Any units older than max. (above) are on borrowed time and may fail, or will likely need some significant expenditure in the near future.
- Air Conditioning/Heat Pump Size:
 1. Take the RLA number (from data plate)
 2. Divide by 7 – this gives you cooling capacity in tons
 3. Each ton is about 12,000 BTU per hour
 4. You need about 12,000 BTU cooling for each 800 sq. ft.
- Bear in mind for cooling:
 - Good insulation may decrease the amount you need
 - Skylights or poor insulation will increase it
 - Orientation – N--E-S-W – may do either
 - A/C units are usually undersized so they work harder

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Through-wall vents

Oil vents **must not** terminate:

- Above a paved walk/driveway between two houses that serves both houses.
- Less than 7 feet above walk/driveway.
- Within 6 feet of any opening window/door/air intake/soffit.
- Within 3 feet of an oil filler or vent pipe.
- Less than 1 foot above grade.
- Within 6 feet of the property line.
- Less than 3 feet from an inside corner.
- In such a way as to cause damage to the building.

Gas vents **must not** terminate:

- Above a paved walk/driveway between two houses that serves both houses.
- Less than 7 feet above walk/driveway.
- Within 6 feet of a mechanical air inlet.
- Less than 3 feet above grade.
- Within the following distances from any opening door/window/non-mechanical air inlet or any combustion air supply:
 1. Where appliance is up to and including 100,000 BTU – 12 inches.
 2. Where appliance exceeds 100,000 BTU – 3 feet.

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Through-wall vents – continued.....

Oil/Gas vents **must not** terminate under any deck/porch unless:

- Porch is open on two sides below the floor
AND
- Minimum 12 inches from top of vent to underside of deck.
- Within 6 feet of a gas regulator (propane, for instance).

Wood Stoves

- Clearances to combustibles – min. 48 inches
UNLESS
- Certified appliance with data plate showing less

Non-combustibles include: concrete, brick, ceramic, steel and some specialized boards

– BUT –

if near wood framing, there must be a min. 1 inch air gap on three sides between non-combustible material and framing.

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PLUMBING

Supply

- Note incoming and in-house materials (often different): copper, lead, galvanized steel, plastic, etc.
- 6-8 gallons per minute needed for domestic water.
- Min.15 gallons per minute needed for water source heat pump and domestic water.
- Potable water **MUST** have zero counts for both coliform and bacteria. Owners to test annually. Tests are usually free.

Well Systems

- **NO WELLS WITHIN 50 FEET OF SEPTIC SYSTEM**
- Jet pumps – (10-15 years) can be seen in house.
- Submersible pumps (15-25 years) hang in well casing and are hidden
- Sand point wells are shallow (<10 feet) and sometimes dry up.
- Dug wells usually <25 feet – often brick or stone casing.
- Drilled wells – 25-300 feet or more – steel casing as far as rock where it should be sealed (grouted).

Waterlogged pressure tanks – symptoms

- Heavy tank
- Low water pressure typical pressure should be 40-65 psi
- Pump cycles or runs as soon as a tap is turned on

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General

- Hot water temperature to be set at 125°F max. **(140°F will scald a child in seconds.)**
- Gas or oil hot water tanks cost c50% less to run than electric ones.
- **Do not** discharge water softener backwash into septic system – it kills the bacteria and can clog pipes (very expensive to repair). Instead, empty to sump (where local regulations allow it) or create a leaching pit.

Sump Pumps

- Small, flexible 1¼ inch, corrugated discharge pipes freeze easily.
Use 3 inch ABS or PVC.
- Submersible pumps are best.
- Column pumps fall over easily.
- Cover sump holes to reduce humidity.
- Ensure house insurance covers sump pump failure. *(Most don't – you have to ask for it.)*

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Septic Systems

- Recommend tank review/maintenance every 2 years
- **No** fat or grease down drains and **nothing** that is not bio-degradable – **no** latex paint, engine oil, etc.
- Only grass allowed on tile bed.
- **No:**
 - Trees within 20 feet, and **no** Willow trees within 75 feet
 - Swimming pools
 - Ice rinks
 - Cars or trucks (small ride-on mowers are OK)
 - Rock gardens
 - Patios or decks
- New septic systems on lots <2 acres usually have to be engineered. This includes new systems installed following failure of old ones.
- New Housing: **Check** roof plumbing stack – plumbers often leave test cap in place, so vent doesn't work.
- Vents required for each fixture. Auto vents not allowed in new construction.
- Slow drain or sewage smells – often due to inadequate venting.

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Septic Systems/Plumbing – continued.....

- Whirlpool tubs must be cleaned regularly (once a month is OK). A cup of bleach or chlorine in a tub full of water will clean the hidden pipes. No switches within reach of tub. (Timers recommended)
- **Check** adequate motor access.
- Tiled shower stalls leak when ceramics are cracked, or grout is missing or in poor condition. Hidden damage can be extensive.
- Recommend bathroom fans with timers or humidistats, even when there's a window. No discharge inside building – includes garage/attic/crawl space/basement.
- Do not install carpets in bathrooms, especially at toilets – unhygienic and can cause floors to rot. Recommend ceramics, vinyl or laminate instead.
- Plastic laundry tubs are almost always loose. Concrete ones crack, leak, and usually drain slowly. Poor place to empty washer.
- Floor drains in homes on storm sewers need back-flow preventers.

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ELECTRICAL

Service Size

- Floor area <850 sq. ft (80 sq. m) – min. 60 amps (16 circuits)
- Floor area >850 sq. ft (80 sq. m) – min. 100 amps (24 circuits)
- 60 or 100 amps may not do it if many large appliances or electric heat

Breakers and Fuses

- Only one circuit for each fuse or breaker (**no** double taps).
- Branch circuits to be 15 amp max. - #14 cable.
- Stove: (generally) 40 amps - #8 cable.
- Dryer: 30 amps - #10 cable.
- Heavy appliances (above) **must** have plug outlets – **no** hard wiring.
- Dishwasher: (usually 120v) - use #12 cable and 20 amp breaker – can be hard wired (separate circuit).
- Fridge: 120v - #14 cable and 15 amp breaker (separate circuit).

Ground Fault Circuit Interrupters (GFCIs)

Install to:

- Bathrooms
- Exterior outlets (<2.5m above grade)
- Whirlpool tubs
- Hot tubs
- Swimming pool equipment

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Outlets

- Outlet required every 6 feet (approx.)
- Light required over every stairway (<4 steps)
- Switch for stair light to be wall mounted, 3-way unless <4 stairs and they are only entrance to unfinished basement – then single pole is OK
- Maximum 12 outlets per branch circuit – should be mixed outlets and lights
- **No** switches/outlets within 3 feet of person in shower or tub (consider arm length/reach)

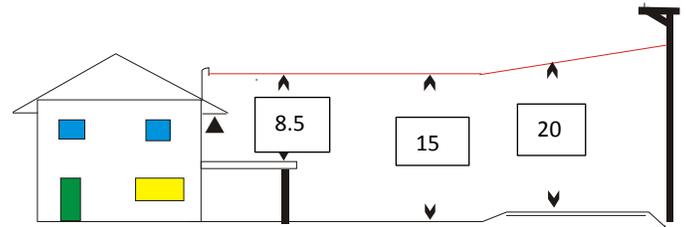
Wire Sizes (Copper)

14 gauge 15 amps	1440 watts (120v)
12 gauge 20 amps	1920 watts (120v) or 3840 watts (220v)
10 gauge 30 amps	2880 watts (120v) or 5750 watts (220v)
8 gauge 40 amps	7680 watts (220v)
6 gauge 50 amps	9600 watts (220v)

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Service Entrance

Line may only pass over roof overhang (**not** main roof)



- Indicates in feet minimum clearance
- Line **must** be 3ft 3 in (1 m) from any door/window – opener or not.

Service Sizes

Service Size	Copper	Aluminum
30 amp	#10	#8
60 amp	#6	#4
100 amp	#3	#1
200 amp	#000 or 3/0	250 MCM

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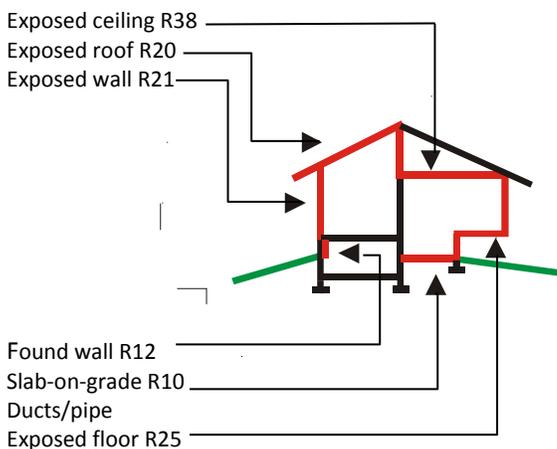
Service sizes – continued.....

- Two outside circuits from main panel OK (for garage/shed etc.)
- More than two – auxiliary panel required at remote building.
- Exterior underground to be min. 18 inches under pedestrian area, or 30 inches under driveway and protected with sand and planks min. 1½ inches thick.
- Conduit required at building entry/exit.

INSULATION AND VAPOUR BARRIERS

You need more (or less) insulation, depending on where you live – so requirements vary.

Guide to minimums:



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Older Homes

- Look for R30 min in ceilings.
- Insulation in walls generally not visible.
- Basement walls often have none – look at heating costs to determine value of upgrading.

Log walls have thermal mass

- They gather heat in hot times (when furnace is on or sun is shining etc.) and then give it back when the surrounding air cools.
- Regardless of location, they **must** be able to give R12 min. for the whole building.
- If log walls are exposed inside, insulation value overall may be made up (to R12) by extra in ceilings/attics etc.

Insulation materials

- Styrofoam® type materials installed in habitable areas must be covered to give min 30 minutes fire resistance. (Some types of drywall OK)
- Loose fill insulation (blown glass fibre/cellulose etc.) can only best be used on horizontal surfaces, except that some water resistant loose fills may be used in the cavities of masonry walls.

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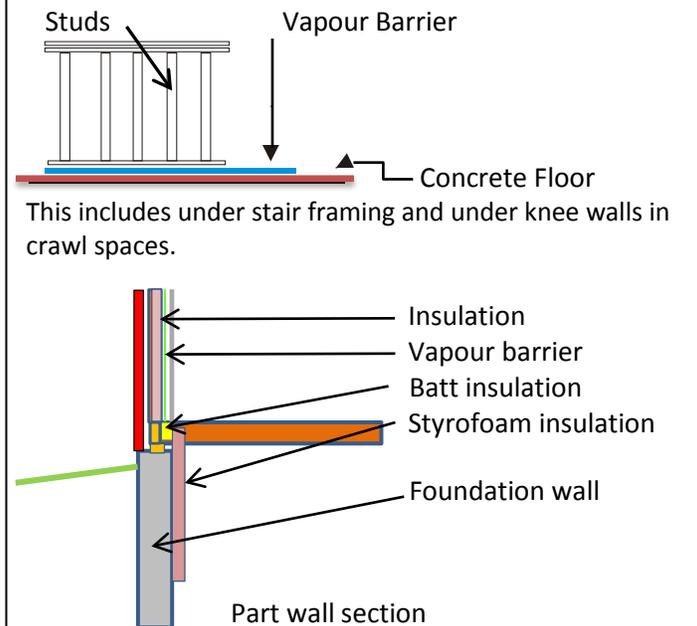
Insulation materials – continued.....

- Urea Formaldehyde Foam Insulation (UFFI) was used in wall cavities of some homes in the 60s. There was a problem with the gas it gave off; some homes became unsaleable.
- Today, CMHC recognizes that it's no longer a problem, but the stigma remains. **VPIS may indicate presence – check with Realtor.** It looks like white meringue – lab test required to verify.
- Vermiculite is another insulation of concern.

The Law of Diminishing Returns

- Adding more insulation is not always cost-effective. The first 6 inches or so save 75% of the heat loss. The next 6 inches saves 75% of the remaining 25%, and so on. So spend (say) \$2,000 on insulation in an uninsulated attic and you might save \$200 on your heating bill. Spend \$4,000, and you'll save \$300. (Of course, these are fictitious figures, but you get the idea.)
- In newer homes, wood framing on concrete floors must have a vapour barrier under the bottom plate, unless it's made of pressure-treated wood (most are not).

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Note: Vapour barrier on warm side of insulation. Styrofoam may act as both insulation and vapour barrier.

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INTERIOR

Walls and Ceilings

- Minor cracks are typical. Large cracks, or those that displace plaster or drywall, are almost always a problem.

Water Stains

- These are often related to a bathroom above and may be a one-off leakage. Could also be ice damming – check insulation and ventilation in attic.

Skylights

- Often leak regularly – plaster/drywall stains (flashing). Wherever there is leakage, there may be concealed framing/insulation damage.

Floors

- Damage to floors (vinyl, ceramics, hardwood etc.) is always expensive to repair. If you miss this, expect to pay. Look under area rugs, and examine tiles closely.

Windows

- Loss of seals in thermos-panes is often difficult to determine. Weather, the sun, or even temperature can have an effect.
- Generally, it is better (or at least more cost-effective) to renovate windows rather than replace them. The capital cost of most new windows can take up to 20 years to recover, using savings from reduced heat loss.
- Check operation, frame and glazing condition.

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Electrical

- **Check** sample of outlets. Often one GFCI covers all bathrooms.
- There **must** be grounded outlets in bathrooms and kitchens – older homes often don't.
- Two-pin outlets are OK otherwise – unless one is needed for a computer. (Surge protectors need ground wire.)
- Three-pin outlets with no ground **must** have ground slot filled – silicon is OK.
- Ensure there are outlets for stove, dryer and fridge – these may be gas now, but your clients may only have electric ones.

Steps and Stairs

- Interior: Tread min. 9.25 in Rise max. 7.875 in.
Exterior: Tread min. 9.875 in Rise between 5 and 8 in.
- Landing width and length not less than stair width.
 - Doors that open onto stairs **must** open onto a landing, except where door opens away from stairs.
 - Only one set of winders between floors permitted.



Not permitted only 1 set of winders only!

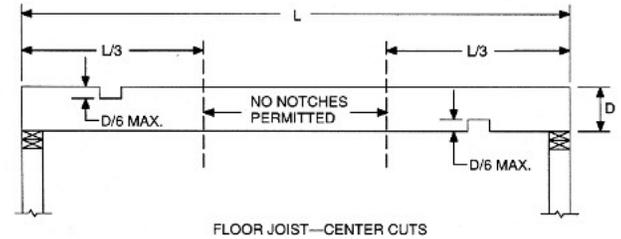
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Handrails Req'd on Stairs/Steps/Landings/Decks

- One side where tread width max. 43 in. – otherwise, both sides.
- On all stairs with 3 or more risers.
- Decks and landings less than 2 ft from ground – no handrails req'd.
- Stairs to UNFINISHED basements only need handrail ONE SIDE – even if both sides are open.
- Handrail height:
 - STAIRS: Min. 32 in to max 38 in
 - LANDINGS/DECKS: 35½ in. (if less than 6 ft to ground) otherwise 42 in.
- Spindles **must not** allow a 4 inch ball to pass between.
- Open risers can be a child hazard – they could fall through. Always advise.
- Exterior wood stairs **must not** be in contact with ground unless cedar or PT.
- Outside steps and stoops require good support (in some cases below frost line).

Framing Details

- Notches away from support – joist size increase by depth of notch.
- Maximum depth 1/3rd joist depth, maximum width ½ joist depth.
- Never notch underside of a joist where it can compromise the joist member.

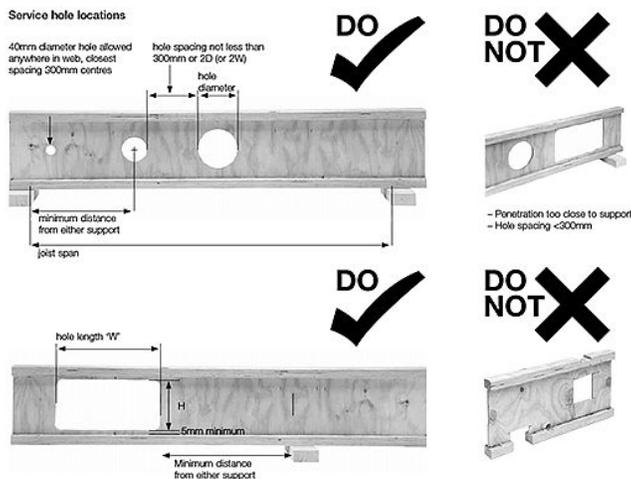


- Drilled holes max. diameter ¼ joist depth, with a minimum of 2" of distance remaining top & bottom.

Truss Joists

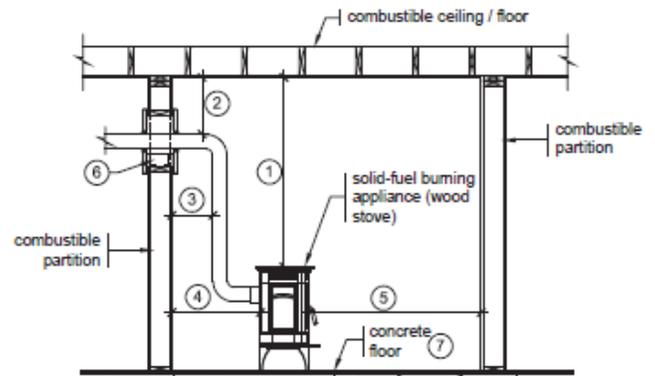
Manufactured truss joists are often considered to be a better choice than 2x10 - 2x12 joists etc. because, unlike a traditional wood joist, we have a good idea of the structural strength of each one. Whereas - with a 2xjoist - we just get what the tree gives us.

Although the following provides clearances for openings, it can vary from different manufacturers. Also consider if fire protection is required. Some are fire treated, others may require fire resistant covering or a layer of protection on the underside.



Solid-fuel Appliance

Verify proper clearances



Section (example)

Minimum clearance between a solid-fuel burning appliance and associated flue pipe and combustible material.

- | | |
|---|---------------------|
| ① 1 500 mm (60 in.) | ⑤ 1 200 mm (48 in.) |
| ② 450 mm (18 in.) | ⑥ 450 mm (18 in.) |
| ③ 450 mm (18 in.) | ⑦ 0 mm (0 in.) |
| ④ 1 200 mm (48 in.) includes side, rear, and corner | |

Note: Minimum clearances may be reduced where the appliance has been tested for lesser clearances or where protection has been provided in accordance with the CAN/CSA-B365-M standard.