

Timberlane
3441 Timber Lane
Cross Plains, WI 53528

August 5, 2011

Re: Construction Site Visit 505 Lavern Ridge Rd.
Rating 159-0574

Site visit one reviews a number of the different Focus on Energy standards (required) and guidelines (not required, but good building practices). This report is a summary of if those standards are being met and any recommendations based off of FOE guidelines. Up to this point you have met all the required standards. Please note that the final site visit will verify some of the required standards (ex. actual fan flow versus rated and overall house tightness).



Nice detail on the caulking of “dead spaces” seen here on the triangle of the fireplace.



Nice foamboard along the gable ends. Ensure that the foam is continued up a bit higher next time so that it can also act as a backing for the insulators to blow against when blowing in the insulation. It will also keep the insulation on top of the top plate.



Would still like to see the strapping along the studs behind the surround and along the bottom plate to make the visqueen more air tight.



Ensure the large hole to outside gets foamed or caulked. Mice will easily use that as an entrance.



Please ensure that this plumbing opening gets air sealed – either with Great Stuff or rigid foam board caulked into place. It is a large opening to the area under the slab – i.e. moisture and soil gasses.

Please don't hesitate to call or email if you have questions or suggestions.

Laura Paprocki
Trinity Environmental LLC
5001 Wallace Ave.
Monona, WI 53716

BUILDER – Checklist

- Standard (required):** Home Energy Rating Index – Home must score a HERS Index of 70 or lower.
- Standard (required):** Overall house infiltration must be ≤ 0.20 CFM per square foot of building shell at 50 Pascals. **Actual performance will be measured at site visit 3 with blower door.**

FRAMERS – Checklist

- Recommendation:** Use a hex screw instead of the hurricane clip – removes a potential condensation point, and pathway for air movement (as the drywall doesn't sit snug against top plate).
- Recommendation:** Place furring strips along the bottom plate and along each stud in areas behind fireplaces and showers/tubs on exterior walls.
- Recommendation:** When using pan flashing around windows – bring pan flashing up along

the vertical sides at least 3 inches.

- Recommendation: Exterior flashing around windows should be placed such that the housewrap is “help up” while the flashing is adhered and then the tyvek is placed back down over the flashing.
- Recommendation: Exterior window flashing should be placed UNDER the tyvek. Tyvek to be cut at 45 degree angles and “hung up” while flashing is installed and then placed over the flashing.
- Recommendation: Provide an energy heel of 12 inches or more.
- Recommendation: Provide something more than fiberglass batt at edge of home in attic. Fiberglass will not stop air and batts will move over time. Here are some options: 1) vent shoot and air barrier combo 2) continue the OSB or foam board up the exterior wall.

ELECTRICIAN – Checklist

- Standard (required)**: Whole house ventilation standard requirement for this house is ventilation with the capacity to comply with ASHRAE 62.2. That means a bath fan rated for continuous use that is measured to meet the performance requirement and has a remote switch outside of the bathroom labeled whole house ventilation. In order to meet this requirement, it is recommended to put in an energy star low sone 110 cfm fan in the master bathroom. All other bathrooms with showers/tubs should also receive a 110 cfm fan. **Actual performance will be measured at site visit 3 with balometer.**

TABLE 4.1a (I-P)
Ventilation Air Requirements, cfm

Floor Area (ft ²)	Bedrooms				
	0-1	2-3	4-5	6-7	>7
<1500	30	45	60	75	90
1501-3000	45	60	75	90	105
3001-4500	60	75	90	105	120
4501-6000	75	90	105	120	135
6001-7500	90	105	120	135	150
>7500	105	120	135	150	165

- Standard (required)**: Spot ventilation: 100 cfm kitchen range exhaust, 20 cfm continuous, or 50 cfm intermittent in high moisture rooms. All ventilation equipment is required to be ducted to the outside.
- Standard (required)**: One carbon monoxide detector (integrated, plug-in, or hardwired) required for each floor with a bedroom.
- Recommendation: When venting the bath fans – use a 6” duct.

PLUMBER – Checklist

- Standard (required):** Sealed sump pit.
- Recommendation: Install passive radon piping.

HVAC – Checklist

- Standard (required):** All combustion appliances must be either direct vent, power vent, or ‘closed’ combustion.
- Recommendation: Install a 95% AFUE variable speed, ECM motor furnace, zones for each floor.
- Recommendation: Tape or mastic all supply and return venting.

INSULATOR and AIR SEALER – Checklist

- Standard (required):** Insulated and gasketed attic access hatch. Any attic access hatch in the conditioned space must be insulated to a minimum R 20 with a perimeter edge gasket. The insulation must be permanently attached to the access hatch.
- Standard (required):** Sealed Plumbing rough-in: Any plumbing “rough in” in the slab must be completely air sealed. Rigid foam or Oriented Strand Board cut to fit and caulked in place are acceptable methods of air sealing.
- Standard (required):** Full foundation insulation
- Recommendation: Caulk the bottom plate to subfloor connection.
- Recommendation: Full attic air sealing package i.e. foam all top plates and any penetration up into attic – see photo below.
- Recommendation: Foaming or caulking mudsill to top of foundation wall connection, top and bottom of rim and band joist. OR spray foam rim and band joists.
- Recommendation: Foaming or caulking penetrations through any drywall, sill box, ceiling or any top plates get – can lights, exhaust fans, electrical, furnace and water heater venting, dryer vent, A/C etc.
- Recommendation: Cavities that are 2” or less should be foamed – do NOT stuff with insulation – this includes perimeter of entrance doors and windows. Fiberglass insulation does NOT stop air! Use low expansion foam OR caulk.